November 12, 2009

Welcome to our fifth annual Conference on Clean Energy – the capstone event of Massachusetts Clean Energy Week. We hope that you have enjoyed one or more of the other events that have comprised Clean Energy Week.

Our fifth conference, much like the Clean Energy sector, has grown enormously in size and complexity since we held the first conference in 2005. But as with our prior conferences we are pleased to provide an opportunity for investors, inventors and entrepreneurs to network with each other. The conference is a showcase for the entire Clean Energy Cluster in New England and beyond; from newly formed companies to those with significant investment and products in the market; from the local market to international opportunities; from efficiency and energy services through solar, wind, hydro and biological sources of renewable energy to novel storage and fuel cell solutions.

Two factors maintain clean energy at the forefront of State and Federal initiatives. First, the need to dramatically reduce our carbon footprint and reduce our impact on our warming world, and second, the contribution this sector can play in reviving the economy. The Commonwealth's executive branch continues to ensure that Massachusetts is seen as a leader in policy arenas as well as in the rapid commercialization of new technologies. We are pleased to have the continuing support of both the Honorable Deval Patrick, Governor of Massachusetts, and Secretary Ian Bowles of the Executive Office of Energy and Environmental Affairs. We are also pleased to welcome Under Secretary Steven Koonin from the US Department of Energy who will give us the view from Washington on Clean Energy policy.

We have ten industry panels that will provide in depth analysis of different clean energy sectors. We have four investment panels – one focused on infrastructure funding for clean energy, a second addressing investments being made by venture capitalists, the third concentrating on seed investing and a new panel looking at the important role of Federal and State funding programs. In addition, we have panels proving insights into international clean energy projects and policy, as well as early stage research being undertaken at our institutions and university spin-off companies.

The centerpiece of our conference continues to be the pitches that will be made by 35 early stage companies, many of which have close links to our local research institutions and universities. These companies are seeking initial investments as well as connections to potential partners and customers. While showcasing primarily companies from Massachusetts we are also pleased to welcome pitching companies from across the country and from the United Kingdom and Norway.

We are very grateful to the numerous sponsors who have contributed to the program. In particular, we would like to recognize the Massachusetts Clean Energy Center, the Canadian Consulate and Foley Hoag who have all made a significant financial contribution to the conference. We are particularly grateful to our committee members, our staffs, and to the numerous volunteers who have helped with the organization and execution of this program. In addition, we have been supported in our marketing efforts by many other non-profit groups who are committed to building the cluster. We appreciate their collaboration with us on this signature event.

We hope you enjoy the conference.

Sincerely,

Dr. Abigail Barrow, MTTC
Conference Co-host

Brad Bradshaw
Mass Hydrogen Coalition
Conference Co-host

Dr. Linda Plano, MTTC
Executive Committee Chair
Co-Chair, Investor Advisory Board

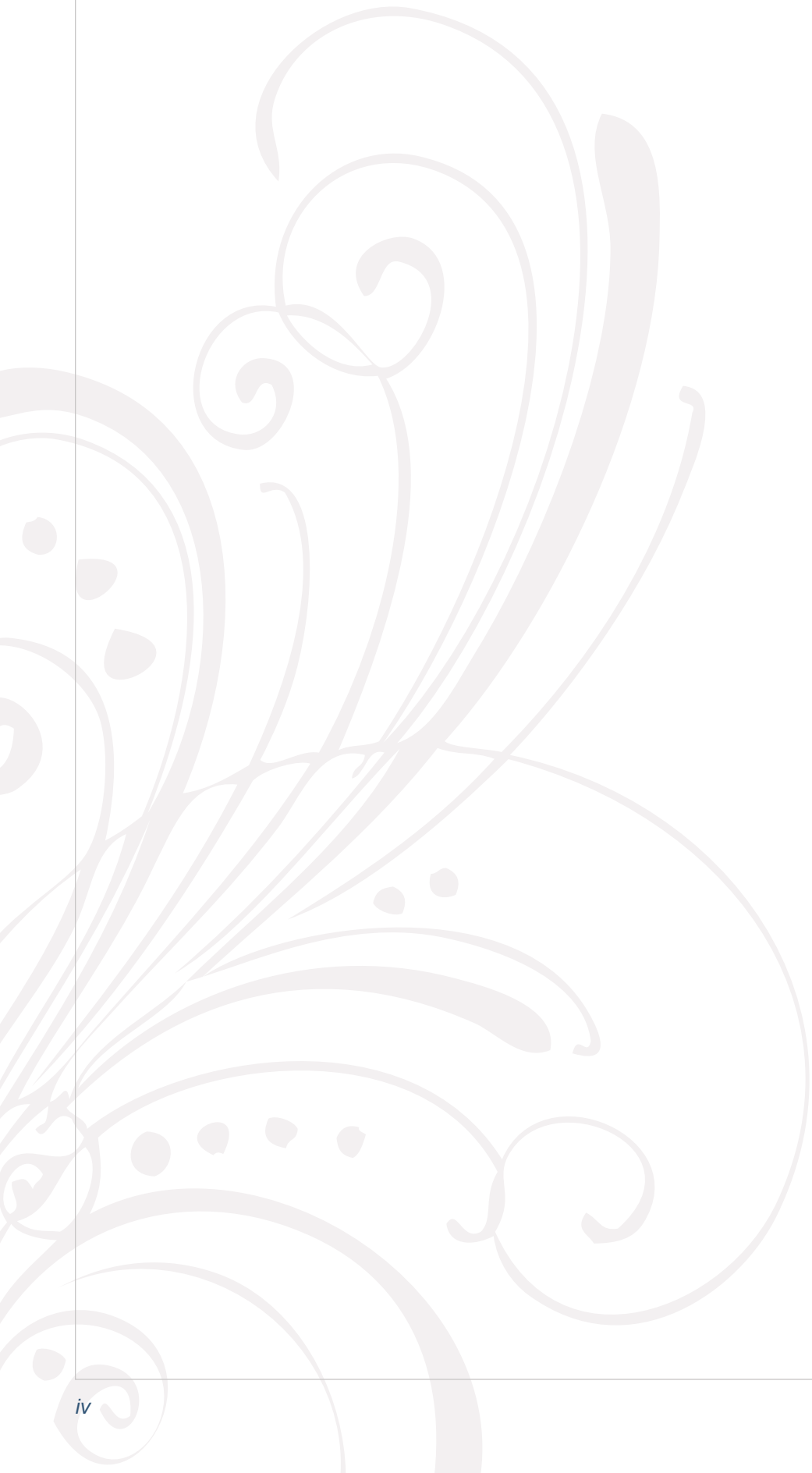
"Clean energy is a core part of Massachusetts' economic future. Now is the time to redouble our efforts to reduce energy use, increase energy independence, curb greenhouse gases and accelerate investment in the clean energy economy. Clean Energy Week - including its signature event, the Conference on Clean Energy - will shine a spotlight on our clean energy future as businesses, government leaders, educators and others team up to share ideas and develop innovative solutions."

The Honorable Deval Patrick

Governor of the
Commonwealth of Massachusetts

Conference Executive Committee

Conference Co-Chairs	**Abi Barrow**, Mass Technology Transfer Center (MTTC) **Brad Bradshaw**, Mass Hydrogen Coalition (MHC)
Executive Committee Chair	**Linda Plano**, MTTC
At Large Members	
At Large Members	**Karl Jessen**, Mass Clean Energy Center (MassCEC) **Greg Watson**, Mass Dept of Energy & Environmental Affairs
Administration and Logistics	
Administration	**Barbara McNulty**, MTTC
Logistics & Conference Notebook	**Julia Goldberg**, MTTC
Marketing and Sponsorship	
PR & Marketing	**Suzanne Moran**, Lois Paul & Partners **Jolene Bonina**, Lois Paul & Partners
Sponsorship	**Abi Barrow**, MTTC
Programming	
Clean Energy Week	**Linda Plano**, MTTC
Exhibit Hall	**Julia Goldberg**, MTTC
Finance Program	**Jerry O'Connor**, Morse, Barnes-Brown & Pendleton, PC **Adam Wade**, Foley Hoag, LLC
Industry Program	**Brad Bradshaw**, MHC **Jim Dunn**, MHC
International Programs	**Abi Barrow**, MTTC
Investor Advisory Board	**Nick d'Arbeloff**, NECEC **Linda Plano**, MTTC
Investor Pitch Sessions	**Linda Plano**, MTTC
Keynotes	**Matthew Richards**, Dane Partners
University Programs	**Marina Dippel**, Sustainability Guild LLC **Chris Noble**, Massachusetts Institute of Technology **Frank Urro**, Vanquish, Inc **Loren Walker**, University of Massachusetts - Amherst



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*See Sponsors Section of the Notebook for more information on these organizations.

Conference Agenda

Thursday · November 12 · 2009

8:00 - 8:40	Registration & Breakfast		
	Ballroom C		
8:40 - 9:30	*Welcome and Opening Keynote:* **Steven Koonin**, Under Secretary for Science, US Department of Energy		
	Room 302	*Room 304*	*Room 306*
9:40 - 10:55	*Industry Panel 1:* **Energy Storage**	*Industry Panel 2:* **Motive Power & Forklifts**	**Investor Pitch Session 1** *Extended Session: 9:40 - 11:20*
	Coffee Break & Exhibit Time		
11:30 - 12:45	*Finance Panel 1:* **Financing Renewable Energy Projects in New England**	*International Panel 1:* **Carbon Regulation and New Business Creation**	*University Panel 1:* **University Research Center Directors**
	Ballroom C		
12:45 - 1:55	*Lunch and Keynote:* **Ian Bowles,** Secretary, Executive Office of Energy and Environmental Affairs, Massachusetts		
	Break		
	Room 302	*Room 304*	*Room 306*
2:05 - 3:20	*International Panel 2:* **Bay of Fundy Case Study**	*Industry Session 3:* **Wind Power**	*Finance Panel 2:* **Seed Funding**
	Break		
3:30 - 4:45	*Industry Session 4:* **Efficiency & Energy Services**	*Industry Session 5:* **Solar Energy**	**Investor Pitch Session 2** *Extended Session: 3:30 - 5:00*
	Exhibit Hall (Ballroom A)		
5:00 - 7:00	**Reception** *Featured Speaker:* **The Honorable Deval Patrick** Governor, Commonwealth of Massachusetts		

Note: Exhibit Hall is Open Throughout the Conference in Ballroom A until 2:30 PM Friday

Friday · November 13 · 2009

7:45 - 8:30	Registration & Breakfast		
	Ballroom C		
8:20 - 9:20	*Plenary Session and Finance Panel 3:* **ARRA and Beyond: Federal and State Government Funding For Clean Tech**		
	Break		
	Room 302	*Room 304*	*Room 306*
9:30 - 10:45	*Industry Panel 6:* **BioEnergy**	*Industry Panel 7:* **Portable Power**	*University Panel 2:* **Clean Energy Spinouts: Perspectives from University Co-Founders**
	Coffee Break & Exhibit Time		
11:15 - 12:30	*Industry Session 8:* **Backup Power**		**Investor Pitch Session 3** *Extended Session: 11:15 - 12:55*
	Ballroom C		
12:55 - 2:15	*Lunch and Finance Panel 4:* **Venture Capital**		
	Room 302	*Room 304*	*Room 306*
2:30 - 3:45	*Industry Panel 9:* **Combined Heat and Power**	*Industry Panel 10:* **Smart Grid**	**Investor Pitch Session 4** *Extended Session: 2:30 - 4:00*
	Break		
4:00 - 5:15		*University Panel 3:* **Changing Careers: Accelerating the Transition to the Green Economy**	

Note: Exhibit Hall is Open Throughout the Conference in Ballroom A until Friday at 2:30 PM.

Speaker Biographies

Featured Speakers

The Honorable Deval Patrick

Governor of the Commonwealth of Massachusetts

Keynote, Conference Reception, Tuesday

Governor Deval Patrick was elected in November of 2006. He brings to the Governor's office a broad range of leadership experience at the top levels of business, government, and non-profits. From an early age, he has built his life on hope, and traced a trajectory from the South Side of Chicago to the U.S. Justice Department, Fortune 500 boardrooms, and now the Massachusetts State House.

Governor Patrick came to the Commonwealth at the age of 14. An excellent student despite the difficult circumstances of under-funded and often violent Chicago schools, he was awarded a scholarship to Milton Academy through A Better Chance, a Boston-based organization.

After graduating from Milton, Patrick went on to Harvard, the first in his family to attend college. He received his degree, with honors, in 1978 and spent a post-graduate year working on a United Nations youth training project in the Darfur region of Sudan. He returned to Cambridge to attend Harvard Law School in the fall of 1979.

Following law school, Patrick served as a law clerk to a federal appellate judge before joining the NAACP Legal Defense and Education Fund. In 1986, he joined the Boston law firm of Hill & Barlow and was named partner in 1990, at the age of 34.

In 1994, President Clinton appointed Patrick Assistant Attorney General for Civil Rights, the nation's top civil rights post. At the Justice Department, Patrick worked on a wide range of issues, including prosecution of hate crimes and abortion clinic violence, employment discrimination, and enforcement of fair lending laws and the Americans with Disabilities Act.

During his tenure, Patrick led the largest criminal investigation prior to September 11th, coordinating state, local and federal agencies to investigate church burnings throughout the South in the mid-1990s.

Patrick returned to private practice in 1997 with the Boston firm of Day, Berry & Howard. That same year, he was appointed by a federal district court to serve as the first chairperson of Texaco's Equality and Fairness Task Force. Working with employees at all levels, Patrick and his Task Force examined and reformed Texaco's complex corporate employment culture, and created a model for fostering an equitable workplace. Patrick was hired by Texaco in 1999 to serve as Vice President and General Counsel leading the company's global legal affairs.

In 2001, Patrick joined The Coca-Cola Company as Executive Vice President and General Counsel. He was elected to the additional role of Corporate Secretary in 2002, and served as part of the company's senior leadership team as a member of the Executive Committee.

Governor Patrick has served on numerous charitable and corporate boards, as well as the Federal Election Reform Commission under Presidents Carter and Ford, and as Vice Chair of the Massachusetts Judicial Nominating Council by appointment of Governor Weld.

The Commonwealth's first African-American Governor, Deval Patrick came into office with a grassroots message of hope, community and hard work. By focusing on transparency and inclusion, he hopes to increase accessibility to government and encourage the civic engagement so crucial to shared progress in education, health care, economic development and other issues.

Diane and Deval Patrick have been married for over two decades and have two college-age daughters, Sarah and Katherine. The Patrick family has lived in Milton, in a house on Deval's high school paper route, for the last 17 years.

Ian A. Bowles

Secretary, Executive Office of Energy and Environmental Affairs, Massachusetts

Keynote, Tuesday Lunch

Ian Bowles, Secretary, Executive Office of Energy and Environmental Affairs in the Deval Patrick administration, has nearly 20 years of experience in the energy and environmental sectors. He was a Director or Advisor to three clean energy technology companies and has broad leadership experience with environmental policy. Bowles served in the Clinton Administration as Associate Director of the White House Council on Environmental Quality and as Senior Director of the Global Environmental Affairs directorate at the National Security Council.

Following his service in the Clinton Administration, Bowles held appointments as a Senior Research Fellow at Harvard's Kennedy School of Government and as Senior Advisor at the Gordon and Betty Moore Foundation, where he oversaw the foundation's strategic analysis of energy and climate change issues.

In 2003, Bowles served as President and CEO of MassINC, a Boston-based research institute, and as Publisher of CommonWealth magazine. Earlier in his career, Bowles served for eight years in key leadership positions at Conservation International, a national environmental organization focused on biodiversity conservation. Bowles serves on the Board of Overseers of the Museum of Science and on the Governing Board of the John Adams Innovation Institute. He is co-author of Footprints in the Jungle (Oxford University Press) on the energy and natural resource industries and environmental practices.

He holds an A.B. in economics cum laude from Harvard College and a Masters degree from Oxford University, where he remains an adjunct faculty member at the graduate school of the Environment and Geography.

Steven Koonin

Under Secrtary for Science, US Department of Energy

Keynote, Conference Opening

Dr. Steven E. Koonin became the Under Secretary for Science in the US Department of Energy on May 20, 2009. In that capacity, he is responsible for guiding and coordinating technical activities across the Department, overseeing its basic research activities, and providing technical advice to the Secretary of Energy. DOE activities are essential to the Administration's goals of promoting basic science, providing clean and secure energy, and enhancing nuclear security.

Prior to his government appointment, Dr. Koonin was the Chief Scientist for BP, plc. Koonin's understanding of energy trends and technologies, widely communicated to the public, underpinned BP's recent investments in alternative and renewable energy sources, including the Energy Biosciences Institute formed in collaboration with the University of California at Berkeley, the University of Illinois at Urbana-Champagne, and Lawrence Berkeley National Laboratory.

Dr. Koonin joined BP in 2004 following a 29-year career at the California Institute of Technology as a Professor of Theoretical Physics. He has published more than 200 scholarly papers and supervised more than 25 PhD theses in such diverse fields as nuclear and many-body theory, nuclear astrophysics, atomic and computational physics, and global environmental science. In a twenty-year teaching career, he educated hundreds of undergraduate and graduate students in advanced physics topics and authored a seminal text on Computational Physics in 1985. Koonin also served as Caltech's Provost from 1995-2004, helping to hire some 100 of the Institute's professors and forming initiatives in biology, astronomy, the earth sciences, the social sciences, and information science.

During the past 25 years, Dr. Koonin has served on numerous advisory bodies for the US Government and its national laboratories, including terms on the Defense Science Board, the CNO's Executive Panel, and the University of California President's Council on the National Laboratories. He is a member of the Trilateral Commission and the Council on Foreign Relations, and was a twenty-year member and former Chair of the JASON advisory group. His work in that latter capacity has included studies on stockpile stewardship, civilian biodefense, radiological terrorism, and DOD basic research.

Koonin was born in Brooklyn, NY. He holds an undergraduate degree in Physics from Caltech and a PhD in Theoretical Physics from MIT. He and his wife Laurie have been married for 34 years and have three children, Anna, Alyson, and Benjamin.

Panelist Biographies

Mohammed J. Alam

President, Alyra Renewable Energy Finance

Panelist, Financing Renewable Energy Projects in New England

Mohammed Alam is the founder and president of Alyra Renewable Energy Finance. A firm imbued with a singular focus and rich experience in renewable energy, Alyra provides financial advisory services exclusively to the renewable energy sector. The firm specializes in M&A, project finance and strategic joint venture advisory. The firm's clients include the leading renewable energy companies and institutional investors in North America and Europe.

Before founding Alyra in January 2004, Mr. Alam served as vice president at Fortis Capital Corp., where he led a range of origination, structuring and restructuring of renewable and conventional power transactions. Before Fortis he worked at GE Capital, providing financial advisory services to GE's power and infrastructure investments in Latin America. Earlier, he started his finance career at Brown Brothers Harriman, focusing on emerging markets research. Mr. Alam holds a Master's degree in Public and Private Management from the Yale School of Management where he was one of three recipients in his class for the Scholastic Excellence Award. He holds a Bachelor's of Science degree, summa cum laude, from the University of Massachusetts, with various scholastic and leadership honors and distinctions, including the valedictorian nomination. Mr. Alam frequently speaks at major international energy conferences and is an author of published articles for leading energy publications.

Tom Atkinson

Director of Network Operations, EnerNOC

Panelist, Changing Careers: Accelerating the Transition to the Green Economy

Tom Atkinson is the Director of Network Operations at EnerNOC and oversees EnerNOC's Network Operations Center (NOC) and directs the NOC team, which prepares for and executes demand response events, manages a network of nearly 2,000 metering and control devices, and provides 24x7x365 customer support. During demand response events, the NOC remotely reduces electric consumption (lighting, HVAC, industrial processes, etc.) and initiates backup generation at customer sites within minutes of notification. The NOC team continuously monitors performance and assists customers in their use of PowerTrak®, EnerNOC's web-based energy information and analytic system.

Prior to EnerNOC, Tom spent 12 years in Tokyo, London, and New York as a software development manager for Goldman Sachs, a leading investment bank. Tom developed methods and systems for streamlining business processes for Goldman Sachs' Private Wealth Management Division, helping the company shift to an exception-based client service platform. Tom was also responsible for the development and maintenance of the company's Purchasing, Accounts Payable, Asset Management and Project Costing systems.

Tom has a degree in Computer Science from Cornell University and an MBA from the Sloan School of Management at MIT. Tom is an active member of the MIT Energy Club.

Abigail Barrow

Founding Director, Massachusetts Technology Transfer Center
Conference Co-Chair, International Sessions Chair

Dr. Abigail Barrow is the Founding Director of the Massachusetts Technology Transfer Center (MTTC). She is responsible for the overall management of the MTTC and the development of its programs. Prior to joining the MTTC, Dr. Barrow served as managing director of William J. von Liebig Center at the University of California San Diego (UCSD). The von Liebig Center was created in 2001 to support the commercialization of research being performed in the UCSD Jacobs School of Engineering. She has also served as a member of the board of directors of the Center for the Commercialization of Advanced Technologies Consortium (CCAT), which assisted in the identification and commercialization of technologies in the area of crisis and consequence management and received more than $25 million in federal funding from the Office of Naval Research.

Dr. Barrow worked in a variety of roles at UCSD CONNECT from 1990 to 2001. At CONNECT, she developed and expanded many of its programs to support early-stage company formation and technology commercialization. The CONNECT program is now internationally recognized and has been successfully replicated in other regions of North America and in Europe.

Dr. Barrow is on the board of the National Collegiate Inventors and innovators Alliance (NCIIA). In addition, she is a Fellow of the Beyster Institute at the Rady School of Management at UCSD.

Doug Banks

Editor, Mass High Tech
Moderator, ARRA and Beyond: Federal and State Government Funding for Clean Tech Panel

Doug Banks is editor of Mass High Tech: The Journal of New England Technology, a weekly publication and daily news web site that spotlights technology entrepreneurs, early-stage companies and emerging technologies in New England. Doug joined MHT in 2005 and led a redesign of the publication in 2006. In that time, MHT has launched several new programs, a new web site and industry-specific newsletters including daily BioFlash and FinanceFlash as well as a weekly GreenFlash devoted to clean tech issues. From 2001 to 2005, Doug was associate editor of the Boston Business Journal (BBJ). He came to the BBJ from Fast Company magazine, where he had been a staff editor after an earlier stint as a reporter/editor at the BBJ in the late 1990s. Outside the newsroom, Doug is a steering committee member for the MIT Enterprise Forum Innovation Series and works closely with several other regional technology associations. He has taught journalism and writing at Emerson College and Boston University, and other colleges. He is vice president of the board of directors at Housing Families Inc., a Massachusetts nonprofit that provides housing for homeless families, and is an advisory board member of Families for Depression Awareness, a Waltham nonprofit that aims to help families recognize and cope with depressive disorders. Doug received a bachelor's degree in journalism and English literature from the University of Massachusetts Amherst and a master's of fine arts in nonfiction writing from the University of Pittsburgh.

Richard Baxter

Principal, Charles River Associates
Moderator, Energy Storage Panel

Richard Baxter is a member of CRA's Energy and Environmental Practice. Mr. Baxter specializes in providing advisory services for private equity and investment banks. Prior to joining CRA, he was a senior member of the equity research team for Ardour Capital, a boutique investment bank focusing exclusively on alternative energy resources and energy technology; he also worked as a senior member of the investment banking team for the same firm. Before that, he was the director of member affairs at the Energy Storage Council

where he was involved in raising the visibility of energy storage technologies for federal and state government officials. Prior to that, he was an economist with Standard & Poor's DRI Energy Group where he managed numerous analytical modeling efforts concerning power sector asset valuation and commodity price forecasts. An accomplished speaker and thought leader in the energy industry, Mr. Baxter has authored many reports and articles, and he is the author of Energy Storage: A Nontechnical Guide.

Jeff Bentley

CEO, CellTech Power
Panelist, Portable Power

Mr. Bentley is responsible for company management, business development, strategic relationships and investments. He has over 15 years of leadership experience in the fuel cell industry and 30 years of experience including development of military and high technology products. For ten years he was a Vice President and energy consultant for Arthur D. Little, now TIAX. He has founded four fuel cell ventures, all of which are operating today or have been acquired.

Mr. Bentley's broad functional experience includes military and computer product engineering, technical sales, marketing and business development and general management. He has a B.S.M.E. M.S.M.E. from the Massachusetts Institute of Technology

Gus Block

Director of Marketing, Nuvera Fuel Cells
Panelist, Motive Power and Forklifts

Mr. Block is responsible for managing OEM/partner relationships for commercial and industrial hydrogen customers in the Americas. Previously, Mr. Block was an Engineer and Program Manager with Epyx Corporation, a spin-off company of Arthur D. Little, Inc., where he helped lead product development initiatives for small-scale PEM fuel cell power systems. Prior to that, he was a consultant for Arthur D. Little's Energy Technology Group. Gus was also a Fulbright scholar in Sri Lanka, where he was engaged in the design and construction of a wind-powered electrolyser for on-site hydrogen production. Gus holds a degree in Mechanical Engineering from The Cooper Union for the Advancement of Science and Art, and a degree in Humanities from Brandeis University.

Andy Bochman

Director, Customer Advocacy, Ounce Labs – an IBM Company
Moderator, Smart Grid Panel

Mr. Bochman is the Director of Customer Advocacy at Ounce Labs, an IBM company whose software helps companies reduce the risks and costs associated with security and compliance concerns. Mr. Bochman also founded and runs the Smart Grid Security Blog that tracks the thinking on how to best secure the emerging smart grid. Mr. Bochman also founded and runs the DOD Energy Blog that tracks and finds solutions to the energy challenges facing the US Department of Defense. Mr. Bochman has an MA in Environmental Management from Harvard University, and a BS from the United States Air Force Academy.

Brad Bradshaw

President, Massachusetts Hydrogen Coalition
Conference Co-Chair, Industry Sessions Chair

Mr. Bradshaw is a senior executive who helps organizations define and implement high performance strategies. Mr. Bradshaw has focused most of his career in the energy industry, spanning electric and gas utility strategies, renewable energy, energy services, and energy management. Mr. Bradshaw is the Interim CEO of Hy9 Corporation, a hydrogen generation and purification company. Mr. Bradshaw also founded and is President of the Masachusetts Hydrogen Coalition, focused on building jobs and investment in the hydrogen and fuel cell industry. Mr. Bradshaw also co-founded the New England Clean Energy Council, an industry association focused on significantly accelerating the devlopment of the clean energy economy in New England. He also co-hosts the annual Conference on Clean Energy, a multi-day regional conference focused on addressing the commercial interests of companies in the clean energy cluster. Illustrative consulting engagements include: developing a near term market and business plan for an advanced membrane technology company; developing the commercialization strategy for an innovative emissions control process coupled with low cost hydrogen generation; and realigning the product and market focus of an advanced energy storage technology company. Mr. Bradshaw has a Bachelor of Arts degree from Dartmouth College with a major in engineering, and an MBA from Babson College.

Warren Brower

Product Marketing Manager, Plug Power
Panelist, Motive Power and Forklifts

Mr. Brower is responsible for developing, planning, and implementing strategic marketing and tactical plans for assigned products/markets at Plug Power. Previously, Mr. Brower had several positions at Raymond Corporation a fork lift truck manufacturer. Mr. Brower has an MBA from the University of Phoenix and a degree in Criminal Justice from SUNY College at Brockport.

Chris M Campbell

Executive Director, Ocean Renewable Energy Group
Panelist, Bay of Fundy Case Study

Chris is a marine scientist and leader in development of Canada's ocean economy. He has a Bsc from Wales, a PhD from Newfoundland, and has worked in France, Newfoundland and British Columbia.

Trained in biology, he worked in aquaculture and seafood industry development as a leader in research, education and consulting.

In recent years he has worked to cluster BC's ocean technology sector and to create Ocean Industries BC as an industry association to focus on economic opportunities from British Columbia's "maritime" activity.

Since 2004, he has focused on building an alliance of industry, governments and utilities to ensure that Canada is a leading player in the emerging renewable ocean energy opportunity. The 120-member Ocean Renewable Energy Group has succeeded in attracting government and utility attention toward this important resource. Chris now serves as Executive Director for this national association.

Judy Chang

Principal, Brattle Group

Panelist, Changing Careers: Accelerating the Transition to the Green Economy

Judy Chang is an economist with a background in electrical engineering. She has expertise in the analysis of electricity power markets and advises clients on the financial and regulatory issues relating to renewable energy investment and procurement decisions. She has authored numerous expert reports for clients and submitted expert testimony before the U.S. Federal Energy Regulatory Commission regarding electricity market design issues. Ms. Chang's recent work includes evaluating the potential impact of integrating renewable energy onto power systems. Accordingly, she has designed a model that estimates the operational impact of variable resources on a grid. She also has recently worked with a major transmission company in analyzing how overlaying extra-high voltage transmission infrastructure could enable the interconnection of additional renewable energy and thereby reduce carbon emissions. She has worked with the two major Connecticut utilities in analyzing the New England renewable energy market as an essential part of their 10-year system planning process. In addition, Ms. Chang has been assisting developers to assess the risks associated with market dynamics including renewable energy credit markets and transmission access. In litigation settings, Ms. Chang has estimated damages resulting from project cancellations and contract disputes. In regulatory settings, she has analyzed market design issues related to capacity, energy, and ancillary services markets. She has led consultants and client teams in performing market power analyses for the purpose of market-based rate proposals and other rate/tariff design issues. She also applies her expertise in transmission system planning, particularly as it pertains to renewable energy development, congestion management, and transmission rate-making processes. Ms. Chang has authored a number of articles and reports and presented at a variety of industry conferences. She recently spent two years in India, where she worked with the International Finance Corporation assisting companies in evaluating and financing renewable energy investments. She is also the founding director of the non-profit association New England Women in Energy and the Environment.

Geoff Chapin

Chief Executive Officer, Next Step Living

Panelist, Efficiency & Energy Services

Geoff Chapin is the Founder and CEO of Next Step Living. NSL provides comprehensive assessments and upgrades to homes across New England, working with utilities, cities, and employers. The service is a one-stop shop, providing guidance and implementation of energy efficiency measures ranging from air sealing and insulation to HVAC systems, home monitoring devices, and on-site renewables. Prior to founding Next Step Living, Geoff served at the senior levels of the Bridgespan Group, a strategy consulting firm for public entities and non-profits. Clients included the Energy Foundation, The City of San Francisco, The Portland Public School District, and the Packard Foundation. Geoff led development of a rapid growth plan for the Energy Foundation and worked extensively with cities in housing, education, and service delivery. Prior to Bridgespan, Geoff led teams at Bain & Company in the New York and San Francisco offices where he consulted for Fortune 500 clients in the consumer products, telecom, and online industries, among others. Geoff also served as a teacher at his alma mater, The Roxbury Latin School, and worked in the public housing sector at The Community Builders in Boston. He is a graduate of Harvard's Kennedy School of Government and MIT's Sloan School of Management and is a Boston native.

Yet-Ming Chiang

Co-Founder, A123 Systems & Professor, Dept of Materials Science & Engineering, MIT

Panelist, Clean Energy Spinouts: Perspectives from University Co-Founders

Yet-Ming Chiang is a founder of A123 Systems, Inc. (Nasdaq:AONE) which develops and manufactures advanced lithium ion batteries and battery systems for the transportation, electric grid services and consumer markets. Chiang is also Kyocera Professor in the Department of Materials Science and Engineering at MIT. He holds S.B. and Sc.D. degrees from MIT, where he has been a faculty member since 1984. His research and teaching focuses on advanced materials and their role in technologies for energy storage and generation, medical devices, "smart" structures, and micro/nano electronics. Chiang is a member of the U.S. National Academy of Engineering, a Fellow of the American Ceramic Society and a recipient of the society's Ross Coffin Purdy, R. M. Fulrath, and F. H. Norton awards. He received in 2006 (with others at A123 Systems) the R&D 100 Award, and the R&D 100 Editor's Choice Award, for their new lithium battery technology, and the Popular Mechanics Breakthrough Award (with A. Belcher and P. Hammond) for developing a virus-assembled battery. He has published about 200 scholarly articles and one widely-used textbook on ceramic materials. His record of inventorship includes 17 issued patents and about 25 pending patent applications (excluding substantially identical foreign patents and filings). Chiang is frequently invited to speak at international forums on materials science and battery technology, electric vehicles, energy issues, and entrepreneurship. Chiang also regularly provides briefings to government decision makers, and has testified before the US Senate Committee on Environment on the electrification of vehicles and its impact on oil consumption and climate change. He is a member of the National Materials Advisory Board, which advises the US Government on matters related to materials technology and government policy.

Patrick Cloney

Executive Director, Massachusetts Clean Energy Center

Panelist, ARRA and Beyond: Federal and State Government Funding for Clean Tech

Patrick Cloney brings to the Clean Energy Center eighteen years of experience in engineering, business, finance and government. His background in power plant operations, management, business development, and strategic planning provides a unique blend of expertise to bring to leading the organization. As an entrepreneur, Cloney has launched businesses in real estate, environmental services, and high technology. Cloney worked previously as Vice President at Susquehanna Capital Management where he managed four portfolio companies. He was also a partner at Clear Power Ventures, where he focused on early stage energy and environmental technology companies, helping them to raise funds and sharpen their business strategies. More recently, Cloney was Executive Director of the Massachusetts Office of Business Development, assisting companies seeking to locate, expand, or maintain their presence in Massachusetts. Cloney earned a BS in Marine Engineering with a concentration in Nuclear Engineering from the Massachusetts Maritime Academy and was the recipient of the Massachusetts Maritime Alumni Award for Outstanding Student Engineer. Cloney earned his MBA with a concentration in Entrepreneurial Studies from Babson College's Olin School of Management.

R. Brooke Coleman

President, New Fuels Alliance, and Founder, REAP Coalition

Moderator, BioEnergy Panel

Brooke Coleman is the founder of the Northeast Biofuels Collaborative and president of the New Fuels Alliance, a not-for-profit organization dedicated to educating stakeholders about the economic and environmental benefits of non-petroleum fuel production and use. He is also the founder of the Renewable Energy Action Project (REAP), a national coalition of organizations promoting renewable energy use. Mr. Coleman has been involved with transportation fuels at the regulatory and policy making level in California and other

states since 1998, first as the Clean Fuels and Climate Change Director for Bluewater Network and later at REAP. He led a national campaign to ban the gasoline additive MTBE, and currently promotes renewable fuels as a viable, near-term strategy to address petroleum dependence and global climate change. Mr. Coleman is a graduate of Wesleyan University, the Northeastern University School of Law, and is a member of the Massachusetts State Bar.

Issam Dairanieh

Member of the Venturing team, BP's Alternative Energy Division

Panelist, Venture Capital

Issam Dairanieh has accountability for assessing emerging clean energy technologies. As a member of the Venturing team in BP's Alternative Energy Division, Issam focuses on green power generation options. He has recently spearheaded BP's effort to assess Concentrated Solar Thermal power generation as a new business opportunity. Issam's career at bp started in bp-Amoco Chemicals with assignments in product and application development as well as technical service. In 2006, Issam moved to the Technology Strategy team and is currently a member of the Venturing team. Issam has degrees in Chemical Engineering from Syracuse (BS) and the University of Illinois at Urbana-Champaign (MS, Ph.D.).

Marina Dippel

Principal, Sustainability Guild LLC

Moderator, Changing Careers: Accelerating the Transition to the Green Economy Panel

Ms. Dippel is a Principal at the Sustainability Guild LLC. She is also a Clean Energy Jobs Training instructor at the Center for Business and Industry at Bristol Community College. Her professional commitment focuses on sustainability innovation and entrepreneurship. Ms. Dippel is on the executive committee for the Massachusetts Clean Energy Conference and the University Clean Energy Research Day, and serves on the Board of the Southern New England Entrepreneurship Forum (SNEEF). She is an active contributor to the Clean Energy and Economic Development Working Groups with the Southeastern Massachusetts Council on Sustainability. Marina Dippel earned a Master's in Public and International Affairs from the University of Pittsburgh, and a sustainability-focused MBA from the University of Massachusetts Dartmouth.

Kevin Doyle

Principal, Green Economy

Panelist, Changing Careers: Accelerating the Transition to the Green Economy

Kevin Doyle is Principal of Green Economy, a private firm offering research, consulting, evaluation, training and facilitation to government, business, nonprofit and academic clients. Green Economy clients and funders include National Oceanic and Atmospheric Administration (Pacific Services Center, Coastal Management Fellowship Program, Coral Management Fellowship Program, Coastal Services Center, Coral Reef Conservation Program, Coastal Programs Division), USDA Forest Service, New England Clean Energy Council, Jobs for the Future, National Fund for Workforce Solutions, Conservation Services Group, National Council for Science and the Environment, National Grid, NStar Gas and Electric, Yale School of Forestry and Environmental Science, Texas Tech University, University of Michigan School of Natural Resources, JFYNetWorks, The Barr Foundation, Skillworks, IM Systems Group, Earth Resources Technology, The Baldwin Group, Lighthouse Consulting Group, American Samoa Coastal Management Program, Guam Coastal Management Program, and many others.

Kevin is the co-author of several green careers research studies, and of four popular books about environmental careers for Island Press, including The Eco Guide to Careers That Make a Difference: Environmental Work for a Sustainable World and The Complete Guide to Environmental Careers in the 21st Century. He

writes the occasional green jobs advice column for www.grist.org and speaks frequently about green careers at conferences and on college campuses. Kevin is the co-chair of the workforce development group for the New England Clean Energy Council, and co-facilitator of the Green Collar Jobs Affinity Group for the National Fund for Workforce Solutions. His work has been noted by New York Times, Boston Globe and Boston Globe Magazine, Newsweek, Forbes, E Magazine, Marketplace Money, Living on Earth, National Public Radio, Sierra, and many local and campus media outlets.

Before starting Green Economy in July, 2007, Kevin was the National Director of Program Development at The Environmental Careers Organization (ECO) for fifteen years. In that role, he helped design, finance and manage paid environmental internships and fellowships that launched the careers of over 11,000 aspiring professionals, more than 25% of whom were Asian, African, Hispanic and Native Americans. Previous to his work with ECO, Kevin served as the Regional Director of ECO's Pacific Northwest office in Seattle, as the director of Neighborhood Economic Development Corporation (NEDCO) in Eugene, Oregon, and as a land use planner and community development coordinator for Kitsap County, Washington in the Seattle metro area. In 1999, Kevin was selected by the College of Liberal Arts at the University of Iowa to be honored as one of the six inaugural members of the university's Alumni Fellows award.

Jim Dunn

CEO and President, Future Solar Systems, LLC
Moderator, Solar Energy Panel

Mr. Dunn has a technical and business background and is an expert in the renewable energy field, particularly in photovoltaics and energy storage. He has over 35 years of experience with large companies like IBM, and Exxon and is a founder of 5 companies, and most recently, was responsible for technology transfer as the Director of NASA's NE Region Tech Transfer Center, for 15 years. He has been successful in raising capital for several recent energy start-ups, and has a solid knowledge of the solar and renewable energy marketplace. Jim has a BSEE from WPI, and is active in the Renewable Energy field and a frequent speaker at energy related conferences and events.

Helen Fairman

Co-Founder, Millville Partners, Inc.
Moderator, Efficiency & Energy Services Panel

Helen Fairman is Co-Founder of Millville Partners, Inc., offering strategic marketing consulting and program development to grow the clean economy. Millville Partners serves clients in the sustainable building and clean energy industries, with expertise in translating complex technical ideas and services into lay terms. With Millville Partners Co-Founder Laura Bartsch, Helen also serves as Co-Executive Director of REBN, the Renewable Energy Business Network; Co-Network Director of the Clean Economy Network; Co-Director of the New England Clean Energy Council's Clean Energy Fellowship (2008 and 2009); and Co-Director of the Governor's Clean Energy Challenge. Helen and Laura are also members of the Progressive Business Leaders Network.

Helen entered the world of energy efficiency and sustainable building in 2004 as Marketing Manager at Cimetrics Inc., a supplier of advanced building automation products and services. Prior to Cimetrics, she was Director of Product Development at Boston Warehouse and Store Designer at Crate & Barrel. Helen graduated from Harvard with honors in Visual and Environmental Studies.

M. "Scott" Faris

Chief Executive Officer, Planar Energy Devices

Panelist, Energy Storage

Scott Faris is a serial entrepreneur with almost two decades of operating, venture-financing and commercialization experience, involving more than 20 start-up and emerging-growth technology companies. As founder and CEO of Planar Energy Devices, a spinout of the U.S. Department of Energy's National Renewable Energy Laboratory, he is responsible for establishing and executing the company vision and direction across all functional areas, including business strategy, product development, and sales and marketing. Mr. Faris had been chairman and CEO of Waveguide Solutions, a developer of planar lightwave circuit and microsystem products that was a spinout of the University of North Carolina, Charlotte. He also was a founding director and COO of Ocean Optics, a precision-optical-component and fiber-optic-instrument spinout of the University of South Florida with a proprietary technology to pattern thin-film filters. Mr. Faris was previously a partner with Corporate IP Ventures (formerly MetaTech Ventures), an early-stage venture fund that commercialized defense technologies. He also was a founding director and the Chief Operating Officer at Ocean Optics, a precision-optical-component and fiber-optic-instrument company. Mr. Faris was the founder and CEO of Enterprise Corporation, a technology accelerator that raised more than $50 million in capital for new and existing technology firms through a private investment forum. He also has served as director of the Florida Seed Capital Fund and as director of Technology Commercialization at the Center for Microelectronics Research.

Curtis S. Felix

CEO and Founder, Plankton Power

Panelist, BioEnergy

Mr. Felix founded Plankton as an integrated supply chain management company to provide biodiesel that would be competitively priced with oil and has led the company to develop a unique integrated algae biorefining business. Previously, as Founder and President of Wellfleet Group, he supplied consulting services to large fuel users to integrate biodiesel into their operations. From 1998-2007, he served as General Manager of Petroleum, at Cambridge Viscosity where he worked with the world's major oil and oil field service companies in exploration and production. In 1994, he founded and served as Executive Vice President of AVSG, a compressed natural gas company, and developed (at the time) the largest CNG station in the country, at Logan Airport. From 1983 until 1994, Mr. Felix served variously as in house consultant to the World Bank for Energy Efficiency and Cogeneration and consulted to and worked in the electric utility industry.

He received degrees in Economics, Political Science and Biology from the University of Vermont and partial completion of requirements for an MBA at Babson.

Andrew Friendly

Member, Advanced Technology Ventures

Panelist, ARRA and Beyond: Federal and State Government Funding for Clean Tech

Andrew joined ATV in 2007 and focuses on investments in clean technology companies in the firm's Waltham, MA office. He represents the firm on the boards of AltaRock Energy and Solar Junction, and is an observer on the boards of Rive Technology and Wakonda Technologies. Andrew co-leads the Renewable Energy Business Network (www.rebn.org), and also co-leads the New England Clean Energy Council's Clean Energy Fellowship Program (www.necec.org). Previously, Andrew was a director at Idealab in Pasadena, CA, where he evaluated energy and clean technologies for possible investment and company creation. Prior to Idealab, Andrew was a Partner at Clean Edge, a strategic consulting practice for the cleantech sector and senior manager of Business Development & Strategy at Zambeel, Inc. Andrew also spent five years at The White House in a variety of positions including Personal Aide to President Clinton and Senior Advisor to the

Special Envoy for the Americas where he worked with Congress to design trade legislation and assisted U.S. companies in gaining access to Latin American markets. Andrew holds an M.B.A. from the J.L. Kellogg Graduate School of Management at Northwestern University and a B.A. from Middlebury College.

Gene Gebolys

Founder, President, and CEO, World Energy Alternatives
Panelist, BioEnergy

Gene Gebolys has guided World Energy to be a global leader in biodiesel. A champion of biodiesel in the U.S. and internationally, he has provided continuing leadership to the National Biodiesel Board since 1996, serving on its governing council and as Chair of its Regulatory Committee. Mr. Gebolys holds degrees from Harvard University and Ohio State University in Economics, Business Management, and Public Policy.

Mark Goodman

Founder, Terawatt Ventures
Panelist, Seed Funding

Mark Goodman is launching an early-stage cleantech fund called Terawatt Ventures focusing on smart grid, energy efficiency, energy storage, and water treatment.

Mark co-founded Brookline Venture Partners in 2004 and was responsible for all aspects of deal sourcing, due diligence, fundraising, and portfolio company strategy. He serves on the board of Volicon Inc., and managed portfolio investments including GenuOne (acquired by OpSec Security Group), Acme Packet (APKT), Circle Lending (acquired by Virgin Money USA), and Consumer United.

Mark is a member of the Clean Energy Venture Group and Environmental Entrepreneurs, and has been a Mentor and Judge for the MIT Ignite Clean Energy competition.

Mark worked at First Chicago Corporation from 1989 to 1992 where he rotated through syndications and asset sales, high yield securities, commercial real estate disposition, and foreign exchange options while completing an MBA at Kellogg in the evenings. As a corporate banking associate in New York, Mark was responsible for credit analysis of securities and commodities firms.

Mark holds a BA in Economics and Philosophy from Emory University where he graduated Phi Beta Kappa, an MBA from the Kellogg Graduate School of Management, and an MA and PhD in Philosophy from Boston College.

John (Jian) Guan

Vice President, Beijing Songzhihui
Panelist, Carbon Regulation and New Business Creation - An International Perspective

Graduated from China Northeastern University of Finance and Economics in 1982, Guan started his career with China National Aero-Technology Import & Export Corporation and promoted to be the manager of the public relation division in a very short two year time. Later on, Guan worked for Hughes electronic international for over 10 years stationed at Washington DC as the director of business development. Before Guan joined Songzhihui, he was the President of Banyu Investment Co, of Japan. His experience covered international business management, sales and marketing, international business development and government relationship. At his current position, he is responsible for Songzhihui's development strategy, oversea partnership, technology transfer and localization as well as investment planning. He has intensive knowledge about China energy policy and market.

Carl Gustin

Founder and President, GroundedPower
Panelist, Smart Grid

Carl Gustin has more than 30 years of energy-related experience. As a senior vice president at Boston Edison and NSTAR he led the design and implementation of award winning energy efficiency and demand response programs. He previously served as a senior executive at the US Department of Energy, the Nuclear Regulatory Commission and the US Synthetic Fuels Corp. in Washington, DC. and more recently was the founder of a regional energy trade association.

Stu Haber

President and CEO, IST Energy
Panelist, Combined Heat and Power

Mr. Haber is President and CEO of IST Energy, the developer of the GEM, a portable & on-site clean waste-to-energy system.

Gary Hawley

Dean of the Faculty of Engineering & Design, University of Bath
Panelist, Carbon Regulation and New Business Creation - An International Perspective

Gary Hawley is the Dean of the Faculty of Engineering & Design at the University of Bath, Professor of Automotive Engineering and the Director of the Powertrain & Vehicle Research Centre. He also holds the prestigious Medlock Chair of Engineering in recognition of, “excellent academic research and its application to industry”. Gary joined the academic staff of the Department of Mechanical Engineering in 1995 after careers with both the National Coal Board and the Royal Navy. During service as a commissioned officer he was appointed on exchange with the United States Navy and served at the United States Naval Academy. He has published extensively on various aspects of diesel engineering, thermal management of heat engines, computational approaches to predicting engine performance and the use of alternative fuels for road transport. He is a member of the All Party Parliamentary Renewable Transport Fuels Group and sits on the scientific committee of the Canadian AUTO21 Network Centre of Excellence.

Chris Hobson

Co-Founder & Chief Operating Officer, Bandgap Engineering
Panelist, Solar Energy

Chris brings to Bandgap over fifteen years of leadership experience in operations, finance, marketing and business development at both Fortune 500 companies and entrepreneurial startups. Prior to Bandgap Chris was SVP Operations at eCredit, a credit risk management and collections software company that was acquired by Fidelity Ventures. Chris is a graduate of McGill University and earned his MBA at Harvard Business School.

Karl Jessen

Director, Cluster Development, Massachusetts Clean Energy Center

Panelist, Seed Funding

Karl serves as the Director of Cluster Development for the Massachusetts Clean Energy - working to increase the job and economic development potential of the clean energy industry in Massachusetts through investments in early-stage companies, and forming partnerships and alliances with industry, universities and clean energy organizations. He also conducts the clean energy research activities for the MassCEC.

He has over 17 years experience in clean energy technology. Prior to joining the MassCEC, Karl was the Economic Development Officer for the Renewable Energy Trust. He also founded a startup technology company and has worked throughout his career with emerging and advanced energy technologies with Arthur D. Little, the Yankee Group and Honeywell. His work has taken him to Europe, the Far East and South America. Karl was an officer in the US Air Force and holds an MBA from Babson College and a BS in electrical engineering from Worcester Polytechnic Institute.

John J. Joyce

President & CEO, Ambient

Panelist, Smart Grid

Mr. Joyce leads the organization. He has over 25 years experience as a senior executive working with international utilities and financial industries. Mr. Joyce has held senior positions with companies such as ABB, Price Waterhouse and Citicorp. He has extensive international experience in business development, consulting and financial markets. From November 2000 through August 2001, Mr. Joyce was the Chief Operating Officer of the Company. In September 2001, Mr. Joyce assumed the leadership of the Company.

Prior to joining Ambient, Mr. Joyce served as Senior Vice President of ABB Financial Services Inc. while also serving as President of Financial Consulting - The Americas, where he led the global energy consulting practice within ABB Financial Services. A CPA in the United States, Mr. Joyce holds an MBA from the Stern School of Business, New York University, where he majored in Finance and International Business.

Mr. Joyce is a founding member of the Universal Powerline Association (UPA). He is also active in the Edison Electric Institute (EEI), Utilities Telecom Council (UTC) and GridWise Alliance.

Richard Karsten

Associate Professor, Department of Mathematics and Statistics Acadia University

Panelist, Bay of Fundy Case Study

Dr. Richard Karsten is an associate professor of Mathematics at Acadia University in Wolfville, Nova Scotia. He has a BMath from the University of Waterloo and a PhD. in Applied Mathematics from the University of Alberta. He spent three years as a Postdoctoral Researcher at the Massachusetts Institute of Technology before joining Acadia in 2001. He early research focused on fluid dynamics and oceanography, in particular, the Antarctic Circumpolar Current. In recent years, Dr. Karsten and his colleagues at Acadia have been working on examining tidal power in the Bay of Fundy. Their work resulted in the first published assessment of in-stream tidal power in the Minas Passage based on a theoretical estimate of extractable energy and a numerical simulation of in-stream turbines. He has also publications examining the tidal resonance in Hudson Strait and the coupling of resonant shallow basins with the Atlantic Ocean. He has given numerous conference and public presentations on tidal power.

Angus King

Founder and Principal, Independence Wind

Panelist, Wind Power

Angus King was Governor of Maine from 1995 to 2003. Elected in his first run for public office in 1994, he was re-elected in 1998 by one of the largest margins of victory in Maine history. In 2007, Angus co-founded Independence Wind, an wind development company based in Maine. In 2009, Angus joined the professional team of Leaders LLC, an investment banking firm, focused on mergers and acquisitions.

Earlier, Angus founded and was President of Northeast Energy Management, Inc., an energy development company. He is currently a Distinguished Lecturer at Bowdoin College and a Visiting Fellow at the John F. Kennedy School of Government at Harvard University . Governor King is a graduate of Dartmouth College and The University of Virginia Law School.

David Kopans

Co-founder and the CFO, EnergyClimate Solutions

Panelist, Efficiency & Energy Services

David Kopans is a co-founder and the Chief Financial Officer for EnergyClimate Solutions. He has been Head of Finance/CFO for two publicly traded companies and is a serial entrepreneur who has started, run, and advised software, hardware, biotech and clean energy companies.

Earlier, Mr. Kopans co-founded Value Added Energy Information Systems (VAEIS) in 2003, a company that quickly became the leading provider of metering and monitoring services to the renewable energy marketplace. In 2005, VAEIS merged with Fat Spaniel Technologies and David was appointed Director of Business Development and Regulatory Affairs. Mr. Kopans received his BA degree in Economics and Public Policy from Brown University and an MBA degree with honors in Finance and Accounting from NYU.

Susan Leschine

Co-Founder & Chief Scientist, Qteros, Professor of Microbiology & Co-Director of TIMBR, University of Massachusetts Amherst

Panelist, Clean Energy Spinouts: Perspectives from University Co-Founders

Susan Leschine is a Founder and Chief Scientist at Qteros, a biofuels technology company headquartered in Marlborough, Massachusetts. She is also Professor of Microbiology and Co-Director of TIMBR, The Institute for Massachusetts Biofuels Research at the University of Massachusetts Amherst. Dr. Leschine earned a Bachelor's Degree in Biology and a Ph.D. in Biophysics and Microbiology at the University of Pittsburgh. She conducted postdoctoral research at UMass Amherst on microbial communities that decompose plant biomass. Dr. Leschine is acknowledged as a leading authority on the biology and diversity of cellulose-digesting microbes, their role in the global carbon and nitrogen cycles, and their industrial applications. She was named a Top Ten Woman in Cleantech by Earth2Tech, and a 2009 "Woman to Watch" by Mass High Tech. The goal of her research is to harness the natural diversity of the microbial world for energy solutions. Presently, research in Dr. Leschine's laboratory at UMass Amherst involves studies of bacteria that directly convert non-food biomass into fuels and other products, research that has formed the basis for Qteros' Q Microbe™ single-step cellulosic conversion technology.

Doug Levin

Founder, former CEO and member of the Board of Directors, Black Duck Software

Panelist, Seed Funding

Doug Levin is the founder, former CEO and member of the Board of Directors of Black Duck Software, serving in these roles since December 2002. Previously, Levin was CEO of MessageMachines (acquired by NMS Communications in 2002) and X-Collaboration (acquired by Progress Software in 2000) - two VC-backed companies based in Boston. In addition he served in management roles for eight years at Microsoft Corporation. Levin's expertise is in startup formation and pre-IPO executive management, finance, software development, marketing and sales. Levin has an advanced degree in International Economics from the College d'Europe in Bruges, Belgium and a BA from the University of North Carolina at Chapel Hill. He was awarded 2007 CEO of the Year by the Massachusetts Technology Leadership Council.

David L. Levy

Professor & Chair, Dept of Management and Marketing, University of Massachusetts, Boston

Moderator, Carbon Regulation and New Business Creation - An International Perspective Panel

David L. Levy is Chair of the Department of Management and Marketing and Director of the Center for Sustainable Enterprise and Regional Competitiveness at the University of Massachusetts, Boston. He received his doctorate from Harvard Business School. His research examines corporate strategic responses to climate change and the growth of the renewable energy business sector in the New England region. He has published and lectured widely on these topics, and recently started a blog, ClimateInc.org, on business and climate change.

Evan Lovell

Partner, Virgin Green Fund

Panelist, Venture Capital

Evan Lovell is a Founding Partner of the Virgin Green Fund ("VGF") a private equity fund focused on growth capital investments in the renewable energy and resource efficiency sectors. Prior to founding VGF Mr. Lovell was a private equity investor with TPG Growth, a $1.5 billion private equity fund focused on growth capital, LBO and late stage venture investing in North America and Asia. At TPG he was a Principal focusing on consumer product, retail and cleantech related investments.

Prior to joining TPG Growth, Evan was a Partner with Aqua International, a TPG fund focused on the cleantech sector where he led over $250 million of equity investments globally. Prior to joining Aqua in 1998, Evan was Director of International Development for Culligan Water Technologies (1994-1998).

Mr. Lovell serves on the board of DTX Oil, Duratherm Inc. and Seven Seas Water.

Craig Lund

Director of Business Development, 1366 Technologies

Panelist, Solar Energy

Craig Lund is Director of Business Development for 1366 Technologies. Craig brings over 8 years of experience in traditional energy markets, economic policy, and entrepreneurship. Previously Craig worked for Endeavor as a strategic advisor assisting early-stage ventures in Latin America and participated in Highland Capital's entrepreneurship program. Prior to that he worked in energy and power finance for Deutsche Bank where he was involved in capital raising and strategic initiatives for large, public power and utility clients.

Craig also spent most of 2004 in Iraq as an economic advisor for the US Department of Defense and received a civilian services achievement award for his efforts. He holds an MBA from Harvard Business School and a Bachelors Degree in Economics from Dartmouth.

Meg McIsaac

Senior Commercial Lender, TDBank

Panelist, Financing Renewable Energy Projects in New England

Meg McIsaac is a senior commercial lender with TDBank. In this role, Meg sources new business opportunities for the Bank focusing on family owned or closely held private business with over $20MM in annual revenue. She has been in commercial banking for 24 years, specializing in commercial and industrial financing. An alternative energy advocate, Meg has been directed to create viable financing programs for smaller wind and solar projects, primarily for community and private use.

TDBank is committed to developing an expertise in this growth market. Meg has been involved in several wind and solar financing projects to date and currently is working with equity sponsors on projects totaling 10-12Mw, scheduled to begin over the next 18 months.

Meg began her career at Bank of Boston before moving to New York to work in syndicated leverage leasing at Fuji Bank. Upon returning to Boston, Meg worked for USTrust/Citizens Bank, Mellon Bank and has been with TDBank since 2006. She graduated from Xavier University in Cincinnati, Ohio and the Stonier Graduate School of Banking at the University of Pennsylvania.

Simon Melrose

Nova Scotia Manager, Oceans Limited

Panelist, Bay of Fundy Case Study

Since first coming to Canada in 1975, Simon Melrose has worked in the field of applied ocean science. During this time he has been Senior Oceanographer and Environmental Coordinator for Petro-Canada's offshore operations, Director of Operations for the Weather Network and Vice President of Operations with Maclaren Plansearch, SNC Lavalin. Presently, Mr. Melrose is the Nova Scotia manager for Oceans Ltd, Canada's largest marine weather and oceanographic company, providing site specific forecasting to most of the offshore operations here and in Newfoundland and Labrador. Mr. Melrose is also chairman of the board of the Ecology Action Centre and a member of Solar Nova Scotia. He is actively involved in renewable energy development and lives off-grid in Musquodoboit Harbour.

John Merlino

President, Sirius Integrator

Panelist, Portable Power

Mr. Merlino is the President of Sirius Integrator, a distributor of energy products and solutions including the line of fuel cells from Smart Fuel Cells, Fuel Cells For Remote Backup Power. Mr. Merlino was formerly in product management at Tyco Fire & Security and Sun Microsystems.

David S. Miller

Founder and Executive Managing Director, Clean Energy Venture Group

Panelist, Seed Funding

David S. Miller, Ph.D. is a founder and Executive Managing Director of CEVG. He is on the board of directors or advisory board of several clean energy companies, and is a volunteer mentor to others at MIT's Venture Mentoring Service. He is also a research affiliate at MIT's Sloan School of Management. David is a New England chapter leader of Environmental Entrepreneurs (E2), a national community of business people who believe in protecting the environment while building economic prosperity (www.e2.org). David co-founded EPrime, which is a forum for clean energy entrepreneurs to network and support each other's enterprises. He is a founding member of the MIT Enterprise Forum's Energy Special Interest Group where he currently manages the mentor program for the IGNITE Clean Energy Business Plan Competition. David was a board member of New England Energy and Environmental Funders, which educated investors interested in energy and environmental companies, and was an advisory board member of the New England Clean Energy Council. David received his BS and MS in Computer Science and Engineering from MIT, and completed his doctorate at MIT's Lab for Energy and the Environment where he studied the utilization of distributed generation and energy efficiency measures. His dissertation examined the impact of a variety of management and investment strategies and public policy initiatives on the success of new clean energy ventures.

John R. Miller

Director, Marine Renewable Energy Center (MREC)

Panelist, University Research Center Directors

John is the founding Director of the Marine Renewable Energy Center (MREC). He has 25 years of experience in technology commercialization in a variety of high technology businesses including Polaroid and GTE, has been President of two companies, and led a startup, Micro Magnetics, that transitioned an advanced materials sensor from university demonstration to Beta ready tool in 11 months. He has a BS degreee in Engineering from the United States Military Academy, West Point, an MS in engineering degree from the University of Washington; and an MBA degree from Worcester Polytechnic Institute. John is active in the New England Clean Energy Council, oyUniversity of Massachusetts Clean Energy Working Group, and sits on the boards of several nonprofit organizations. He actively employs his own renewable energy rowing whale boats.

Greg Moreland

Senior Finance Analyst, Sentech, Inc.

Panelist, Motive Power and Forklifts

Mr. Moreland is employed at Sentech, a clean energy and energy efficiency consulting company, where he is responsible for providing support to the U.S. Department of Energy Hydrogen Program's market transformation of fuel cells and hydrogen infrastructure. Mr. Moreland's career features 30+ years of experience in external relations, financial management, program/project management, and M&A with Ford Motor Company, MTI MicroFuel Cells, and Sentech. He serves or has served on the Boards of the NYS Workforce Investment Board, New Energy New York (2007 chair) and the US Fuel Cell Council.

Dana Morin

Director and Officer, President, Fundy Tidal Inc.

Panelist, Bay of Fundy Case Study

Fundy Tidal Inc. founder and president Dana Morin is an active participant in the creation and growth of community economic development investment funds and renewable energy initiatives in Nova Scotia. He was the founding president of the network of the eight community investment funds collectively referred to as the "Scotian WindFields" and the Sustainable Islands Community Economic Development Investment Fund. Dana was also a founding director and management of Scotian WindFields Inc., DaoPower Canada Corporation, Wind Driven Inc., Wind Horse Power Ltd. and Fourth Generation Capital Corporation (4G) which specializes in carbon credit and emissions trading.

Sanjeev Mukerjee

Professor and Director of the Center for Renewable Energy Technology, Northeastern University

Panelist, University Research Center Directors

Sanjeev Mukerjee is a professor of Chemistry at Northeastern University and Director of the Northeastern University Center for Renewable Energy Technology. Dr. Mukerjee's areas of expertise include: Electrocatalysis - Understanding Electrocatalytic Pathways in Complex Reaction Centers; Intercalation Compounds - Understanding charge compensation in complex structures as a function of intercalation; In situ Synchrotron Spectroscopy - Development of New Methodologies for X-ray Absorption and Scattering Methods; and Fundamental Understanding of Transport Phenomenon in Polymer Electrolytes. He received his MS and M.Tech degrees from the Indian Institute of Technology and his PhD in Chemistry from Texas A&M University.

Nick Murphy

Commercial Manager, OpenHydro Group Ltd.

Panelist, Bay of Fundy Case Study

OpenHydro Group Ltd. is an Irish energy technology company whose business is the design and manufacture of marine turbines for generating renewable energy from tidal streams. Since joining OpenHydro Nick has been involved across the business including managing grid connection of the EMEC Research Structure and with the development and delivery of the company's first deployment vehicle, the OpenHydro Installer and the first subsea base, also located at EMEC. Nick currently holds the position of commercial manager within the company and has primary responsibility for delivering the first 10m unit which is due for deployment later this year in the Bay of Fundy in a project being developed in partnership with Nova Scotia Power, as well as looking after OpenHydro's future projects. Prior to joining the company Nick was employed by E.ON UK and was integral in setting up their Marine Renewables business unit which was a direct progression of his role as an offshore wind developer, also with E.ON UK. Nick has a Masters degree in subsea engineering and a first degree in Oceanography. He holds a commercial diving qualification and sits on the Society for Underwater Technology's Marine Renewable Energy Committee.

Charlie Myers

President, Trenergi Corp.

Panelist, Combined Heat and Power

Mr. Myers co-founded and is leading Trenergi, a manufacturer of global distributed energy micro combined head and power (microCHP) systems based on high temperature PEM fuel cell technology. Prior to Trenergi, Mr. Myers was Director of Marketing at Nuvera Fuel Cells and the Global Market Leader for the company's PowerTap Hydrogen Generation product line. Earlier, Mr. Myers was Vice President of Sales and Marketing for Iwaki Americas, an international manufacturer of fluid and air-handling pumps. Charlie holds an Executive MBA from Saint Mary's of Moraga, Moraga, California, and a BS degree.

Chris Noble

MIT Technology Licensing Officer

Moderator, Clean Energy Spinouts: Perspectives from University Co-Founders Panel

Christopher Noble is MIT's Licensing Officer for energy technology. He previously worked for twenty-five years in energy and technology companies ranging from the Fortune 500 (Schlumberger, Analog Devices) to startups (Philsar). Chris has raised and negotiated VC financings and served on the Board of several private companies. He has lived and worked in South America and Europe and is fluent in French and Spanish. Chris's non-profit activities currently include serving on the Board of Design That Matters, a product design company focused on the health and education needs of the poor in developing countries. He previously was the Founding Director of the New England Region of Future Scientists and Engineers of America.

Matthew M. Nordan

Vice President, Venrock

Panelist, Venture Capital

Matthew Nordan is a vice president at Venrock, a premier venture capital firm originally established as the venture arm of the Rockefeller family. He focuses on breakthrough energy, environmental, and materials technologies from the firm's Cambridge, MA office.

Prior to Venrock, Matthew was president of Lux Research, an advisory services firm for science-driven innovation that he co-founded in 2004. Under Matthew's leadership, the Lux Research analyst team became a globally recognized authority on the business and economic impact of emerging technologies, advising corporations, start-ups, financial institutions, and governments. Before Lux, Matthew held a variety of senior management positions at emerging technology advisor Forrester Research in the U.S. and Europe.

Matthew has testified before the U.S. Congress four times on emerging technology issues, advised the Committee to Review the National Nanotechnology Initiative of the National Academies, and been an invited speaker at universities including Harvard, MIT, and Columbia. He is a member of the World Economic Forum's Global Agenda Council on Emerging Technologies and has advised the OECD on technology development for energy and environmental applications. A regular speaker at technology conferences, Matthew has been frequently cited by news outlets including CNBC, ABC News, The Economist, and Newsweek.

Matthew is a summa cum laude graduate of Yale University, where he conducted cognitive neuroscience research on the neural pathways mediating emotion and memory.

David O'Connor

Senior VP for Energy and Clean Technology, ML Strategies, LLC

Panelist, Carbon Regulation and New Business Creation - An International Perspective

David advises energy and technology companies on emerging public policies and devises strategies that will expand their markets and accelerate their growth. As Massachusetts Commissioner of Energy Resources from 1995 to 2007, he was responsible for implementing the state's first-ever Renewable Energy Portfolio Standard and directed the state's $125 million/yr. energy efficiency incentive program. He also represented the state in the development of the first-ever, multi-state agreement to "cap and trade" carbon emissions from power plants. In the 1990's he led the state's historic deregulation of the electric industry which for the first time enabled companies and consumers to choose their electricity supplier. David received his Masters in Public Administration from Harvard's Kennedy School of Government and his undergraduate degree from Middlebury College in Vermont.

Jerry O'Connor

Member, Morse, Barnes-Brown & Pendleton, P.C.

Moderator, Venture Capital Panel

Jerry O'Connor has a wide-ranging business law practice that focuses on corporate finance transactions, mergers and acquisitions, securities law and intellectual property matters. He represents clients in a variety of industries, including clean energy technology and renewable energy, software and information technology, manufacturing, venture capital and professional services. Jerry's practice has a particular focus on advising early stage clean energy technology companies in all aspects of their formation and growth, including negotiating and carrying out angel and vc financings, strategic alliances and joint venture agreements. Jerry is active in several renewable energy industry groups, and serves as Clerk of the Massachusetts Hydrogen Coalition and of the New England Clean Energy Council. Jerry is a graduate of the University of Massachusetts, Amherst and of Northeastern University School of Law.

Tom Ollila

Business Development Manager, Dantherm Power

Panelist, Backup Power

Tom Ollila is the Business Development Manager for Dantherm Power, a leading supplier of Fuel Cell backup power systems. He is responsible for growing the company's backup power business in North America. He has been in the renewable and Fuel Cell industry for over eight years and has worked for Plug Power, Parker Hannifin and GE.

Martin Olsen

Vice President, Business Development, Active Power, Inc.

Panelist, Backup Power

Martin Olsen serves as the company's vice president of Business Development. In this role, Olsen leads all global business development activities to help grow Active Power's product and sales distribution channels.

Olsen brings more than 11 years of global marketing, product marketing and development to Active Power. He served as director of the Data Center Group for Wright Line LLC, a Worcester, Mass. based data center infrastructure firm prior to joining Active Power in early 2007. Prior to that, Olsen worked in the United States and several years overseas working in Munich and Singapore, where he led the product marketing and business development charter for APC-MGE.

A U.S. patent holder, Olsen received his bachelor's of science in Marketing from the International Business College at Kolding, Denmark. In addition to his degree, he also earned diplomas in Logistics and International Business Law from the International Business College at Kolding, Denmark.

Scott A. Pearson

Chief Executive Officer, Protonex Technology Corporation
Panelist, Portable Power

Mr. Pearson has over 17 years of experience leading a wide range of technology-based companies and organizations. His management experience includes start-up companies, turnaround situations, acquisition integrations, and large commercial and institutional firms. Mr. Pearson's professional experience spans a broad range of industries including uninterruptible power systems (UPS), electric vehicles, electronics assembly equipment and materials, digital imaging, and defense systems. Most recently, as President, Americas of Powerware Corporation (a leading UPS provider), Mr. Pearson oversaw a $480 million operation, significantly increasing its market share, profitability and cash flow. Mr. Pearson holds an M.B.A. from MIT's Sloan School of Management, an M.S. in Mechanical Engineering from MIT, and a B.S. in Mechanical Engineering from the University of Massachusetts.

Linda S. Plano

Associate Director, Massachusetts Technology Transfer Center
Conference Executive Committee Chair and Investor Advisory Board Co-Chair

Dr. Linda Plano is the Associate Director of the Massachusetts Technology Transfer Center (MTTC). In this role, she assists in the development and implementation of MTTC programs. Her focus is on recruiting and coaching early stage entrepreneurs for these programs with the goal of facilitating the commercialization of their technologies. Dr. Plano works with inventors in all high tech sectors from life sciences to information technology and has coached over 200 entrepreneurs and inventors in preparation for their presentations to investors at the MTTC, many of whom have gone on to found companies, several of which have raised millions of dollars in venture funding.

Dr. Plano is committed to the development of the Clean Energy custer in Massachusetts and the region. She has co-chaired the Conference on Clean Energy: Financing and Partnering for Emerging Businesses, held jointly with the Massachusetts Hydrogen Coalition,since its inception in 2005. As a volunteer, she co-founded the Energy Special Interest Group at the MIT Enterprise Forum and served as chair for its highly successful Ignite Clean Energy Business Plan Competition which has provided mentoring and networking opportunities to over 100 teams in its first four years as well as more than half a million dollars in cash and prizes to the winners.

Dr. Plano serves on the Governing Board for the Massachusetts Renewable Energy Trust, as well as on the Boards of Directors of the New England Clean Energy Council, the MIT Enterprise Forum of Cambridge and the Global MIT Enterprise Forum.

Dr. Plano has been involved in business and product development throughout her career in positions ranging from Vice President for New Business Development at MicroNetworks Corporation, Group Head at both Kobe Steel's Electronic Materials Center and Sarnoff Corporation. She earned a Ph.D. in Materials Science and Engineering from Stanford University and B.S. in Physics from MIT.

Patrick Quinlan

Associate Director, UMass Wind Energy Center

Panelist, University Research Center Directors

Patrick Quinlan is currently the Associate Director of the UMass Wind Energy Center He has been actively involved in wind power, clean technology development, and technology transfer since 1982. In the early 1980's he worked at Southern California Edison and AeroVironment Inc. on wind turbine test projects and early wind farm development. At AeroVironment, he also managed business development for their electric vehicle introductions. As a consultant to Western Area Power Administration, he worked with individual electric cooperatives and municipal utilities on renewable energy projects and planning. Later, in Washington DC, Patrick served as a Congressional Fellow working for the Ranking Member of the House Science Committee, then as the ASME White House Technology Fellow supporting the Presidential Science Advisor at the Office of Science and Technology Policy. Patrick also worked for the National Renewable Energy Laboratory in the Washington office, serving the Federal wind energy, solar energy, geothermal, and hydrogen technology programs. In Massachusetts, at Second Wind Inc., Patrick managed business development of wind farm monitoring and sodar instrumentation products. Patrick holds a B.Sc. in Mechanical Engineering from the University of Massachusetts (wind energy program), an M.Sc. in Mechanical Engineering from the University of Wisconsin (Solar Energy Laboratory), and a Professional Engineering license in mechanical engineering in California.

Jesse Reich

Co-Founder & CEO, Baystate Biofuels, LLC

Panelist, BioEnergy

Prior to launching Baystate Biofuels, Dr. Blair "Jesse" Ellyn Reich worked for BASF in their inorganics and sustainable marketing division. Jesse satisfies his passion for teaching as an Assistant Professor of Chemistry at the Massachusetts Maritime Academy. He received a bachelor's degree from Bates College and a doctorate in chemistry from Texas A&M.

Wanda Reindorf

Chief Financial Officer, Conservation Services Group (CSG)

Panelist, Changing Careers: Accelerating the Transition to the Green Economy

At CSG, Wanda Reindorf works to promote clean and renewable energy in addition to overseeing the company's Finance and HR functions. Ms. Reindorf brings more than 20 years of results-oriented financial management and strategic experience for a variety of public and private companies. She is a Phi Beta Kappa graduate of the University of Pennsylvania and has an MBA from Yale University. Wanda co-chairs the Workforce Development Committee for the New England Clean Energy Council, and has recently been appointed by Governor Patrick to the Massachusetts Workforce Investment Board. She is involved in a number of clean energy activities such as the Yale Center for Business and the Environment and the MIT clean energy competition in addition to work on a number of professional associations. CSG-founded 1984, designs, develops, and delivers energy efficiency and clean energy programs and services nationwide. More information is at www.csgrp.com.

Matthew Richards

Managing Director, DanePartners

Keynote Sessions Chair

Matthew has more than 10 years of retained search and executive recruiting experience, currently as Managing Director of DanePartners, and on the executive recruiting team at Cognizant, a global IT consulting leader. Matthew's past experiences include a global retained search firm, a small boutique, and as the Director of Recruiting at a high-growth startup. Matthew founded DanePartners to focus on recruiting for energy & cleantech companies. He serves on the steering committee for several clean energy organizations including the TiE Energy & Cleantech Special Interest Group, The MIT Enterprise Forum's Energy Special Interest Group, the Ignite Clean Energy (ICE) Business Plan Competition, and the MTTC's Conference on Clean Energy. Please visit www.danepartners.com for more info.

Mark Rodgers

Communications Director, Cape Wind

Panelist, Wind Power

At Cape Wind, Mark's primary responsibilities are media relations and community outreach. Prior to taking this position with Cape Wind in January of 2002, Mark was a Director of HealthLink, a Salem-based citizens advocacy organization working to reduce harmful fossil fuel power plant emissions. Mark received a BA in Political Science from the George Washington University.

Peter Rothstein

Senior VP & Co-Chair, Innovation Task Force, New England Clean Energy Council

Panelist, ARRA and Beyond: Federal and State Government Funding for Clean Tech

Peter is Senior Vice President of the New England Clean Energy Council and leads the Council's Energy Innovation Consortia project and other innovation-stage initiatives, including the Council's Clean Energy Fellowship Program. The Council focuses on accelerating New England's clean energy economy and building a world-class cluster of clean energy companies. The Council represents nearly 150 member clean energy companies, venture investors, major financial institutions, local universities and colleges, industry associations, area utilities, labor and large commercial end-users.

Peter has many years of venture, entrepreneurial, executive and deal experience across the cleantech venture market. Previously, Peter was part of the Flagship Ventures team, a leading seed and early stage venture capital firm in Cambridge Massachusetts, and founder of Allegro Strategy, a consultant, advisor and interim executive with early-stage cleantech start-ups. Peter has been in early-stage deal or executive roles with a number of cleantech companies, including Mascoma, Planar Energy Devices, Ze-gen, Novomer, Boston-Power, and Mechanology.

Peter is actively involved in a range of leading cleantech and entrepreneurial organizations, including the National Renewable Energy Lab's VC Advisory Board, catalyst to MIT Deshpande Center solar and energy storage MIT projects, Co-Chair of the New England Clean Energy Council's Innovation Task Force, and a Board member of the MIT Enterprise Forum of Cambridge.

Emanuel Sachs, Ph.D.

Chief Technical Officer, 1366 Technologies & Professor of Mechanical Engineering, MIT

Panelist, Clean Energy Spinouts: Perspectives from University Co-Founders

Dr. Emanuel Sachs is the Chief Technical Officer of 1366 Technologies, a silicon photovoltaics company based in Lexington, Massachusetts. As the CTO, Dr. Sachs leads the company in its mission to produce the world's most cost-effective and commercially viable solar cells.

Dr. Sachs is a Fred Fort Flowers and Daniel Fort Flowers Professor of Mechanical Engineering at MIT and specializes in the design of high-efficiency manufacturing processes. Prior to joining the MIT faculty, Dr. Sachs spent seven years working in the photovoltaics industry.

He's the inventor of "String Ribbon", a ribbon crystal growth process for making low cost substrates for solar cells, which is now being commercialized by Evergreen Solar, Inc. of Marlboro, MA.

Among his many accomplishments, Dr. Sachs also co-invented Three Dimensional Printing, a manufacturing process for the creation of 3D parts (directly from a computer model) in layers. 3D Printing is now being commercialized in fields-of-use, including appearance models, ceramic molds for castings, direct metal tooling, end-use metal parts, medical devices and pharmaceuticals.

Dr. Sachs has received a number of prestigious awards over the years, as well. Together with co-workers, Dr. Sachs was awarded an R&D 100 award in 1994 for his work on 3D Printing. He has received several best paper awards. Dr. Sachs was also selected as a Hertz Foundation Fellow and earned the Hertz Foundation Doctoral Thesis Prize in 1983 for his work on String Ribbon.

Dr. Sachs holds B.S., M.S. and Ph.D. degrees in Mechanical Engineering from MIT.

Currently, his sole research focus is on PV and he supervises a growing PV research group at MIT. The group is currently pursuing projects in wafer fabrication, surface texturing for light trapping, metallization, and light trapping at the module design level.

Nachum Sadan

President and CEO, Amperion, Inc.

Panelist, Smart Grid

Nachum is responsible for the strategic direction of the company and the running of its business operations. He is a serial entrepreneur with over 25 years of experience in computer networking and communications. Nachum was co-founder and VP Engineering of two networking startups that successfully sold.

Prior to his position at Amperion, Nachum was Chief Operating Officer of Mintera Optical Networks, a pioneer in development of 40Gbps optical transport products. Prior to Mintera, Nachum served as Executive Vice President of Technical Operations at Sitara Networks, delivering Quality of Service (QoS) products to large enterprise and service provider customers. During his period the company grew from a technology start-up into a high gross margin, revenue-producing business, serving major enterprise and telecommunications carriers worldwide.

Nachum holds an MSEE degree from Northeastern University in Massachusetts and a BSEE degree, cum laude from the Technion, Israel Institute of Technology. He is a member of the MIT Enterprise Forum, MassNetComms, American Technion Society, Northeastern University Alumni Association and IEEE.

Sumul Shah

CEO, Solaya Energy

Panelist, Financing Renewable Energy Projects in New England

Sumul Shah is the Chief Executive Officer of Solaya Energy, a vertically integrated renewable energy company that develops, constructs, and operates power projects throughout the world. With expertise in the areas of wind, solar, fuel cell, and geothermal power, Solaya is developing 630MW of renewable energy projects in India, Brazil, and the United States. Locally we are developing over 50MW of wind projects with a focus on community scaled or behind the meter projects. Sumul also is the President and Founder of Lumus Construction, a full service construction and facilities management company that focuses on major historic restoration work, government facilities, and other highly complex projects. Earlier this year at the White House, President Barrack Obama awarded Sumul the "2009 Business Person of the Year" award for Massachusetts and first runner up nationally in recognition of his business accomplishments and his contributions to the community. Sumul holds a Sc.B. in Civil Engineering from Brown University and a S.M. in Construction Management from the Massachusetts Institute of Technology.

Jeffrey P. Steele

Member, Morse, Barnes-Brown & Pendleton, P.C.

Moderator, Seed Funding Panel

Jeff practices securities and general corporate law, focusing on start-ups and developing companies in high technology industries, including clean energy technology, medical devices, software and biotechnology. He has extensive experience representing start-ups, developing companies and investment and venture capital firms in connection with private placements, seed and venture capital financings, mergers and acquisitions, intellectual property licensing, initial and secondary public offerings, public company compliance work, and executive employment matters. Before joining Morse, Barnes-Brown & Pendleton, Jeff was an associate with Bingham Dana, LLP, Boston. Jeff graduated magna cum laude from the University of Colorado at Boulder, and earned an A.M. in history from Brown University. He graduated from Cornell Law School in 1992.

James Taylor

General Manager, Carbon Management

Panelist, Bay of Fundy Case Study

Started with NSPI in 1978 involved initially with the design and construction of coal generating units and then their operation. Came to head office in 1992 and progressed through the organization eventually leading the power production team, the engineering and environmental team and currently focused on the transformation of the company to one that has a much more balanced portfolio of prime energy sources from one that is carbon intensive. He is the executive sponsor of NSPI's in stream tidal demonstration project. Currently chairs the Air Issues Committee of the Canadian Electricity Association and the Canadian Sub-committee of IEC's TC114 dedicated to create standards for marine energy worldwide. James is a professional engineer.

John Utzschneider

Partner, Bingham McCutchen LLP
Moderator, Backup Power Panel

John Utzschneider focuses primarily on mergers and acquisitions and corporate finance, inlcuding debt restructurings. He serves as deputy chair of the firm's Corporate Area and co-chair of the firm's Corporate, M&A and Securities Practice Group and the Energy Industry Group and is a member of the Management Committee at Bingham. John has represented both private and public companies, equity and debt financing sources and underwriters in mergers and acquisitions, leveraged buyouts, joint ventures, private and public offerings, and restructurings. He also represents public companies and boards of directors on securities, corporate governance and related matters. He has been named to various peer-reviewed "best lawyer" lists in various categories, including the Best Lawyers in America, Chambers USA: America's Leading Lawyers for Business, Lawdragon 3000's "Leading Lawyers in America," and the Lawdragon "500 Dealmakers in America 2007." John received his Juris Doctor degree from the New York University School of Law and his Artis Baccalaureate degree from Dartmouth College.

Toni Volpe

President and CEO, Enel North America
Panelist, Wind Power

President and CEO of Enel North America, Inc. since 2005, Mr. Volpe has been responsible for the introduction of geothermal activities into the Company's U.S. portfolio, as well as the expansion of wind and hydropower projects. Mr. Volpe worked previously in Corporate Strategy at Enel S.p.A.

Prior to joining Enel, Mr. Volpe was a senior consultant at Bain & Company in Italy where he served clients in various industries (luxury goods, financial services, postal services, ICT companies) focusing on strategy, business planning and organization. He was previously a manager at Decathlon Logistics in Marseilles, France. Mr. Volpe holds an MBA from Columbia University's Graduate School of Business and graduated cum laude in Management, Economics and Industrial Engineering from Politecnico of Milan, Italy.

Adam Wade

Associate, Foley Hoag
Moderator, Financing Renewable Energy Projects in New England Panel

Adam Wade is a member of the Business Department's Energy Technology & Renewables group. His business, corporate and project finance experience includes broad-based experience serving the needs of renewable energy companies in their development and financing of wind, solar and geothermal projects, including drafting and negotiating operation and maintenance agreements, natural gas and wood fuel supply agreements and off-take agreements such as renewable energy credit sales agreements and residential and commercial solar power purchase agreements.

In the wind industry, Adam has had significant experience representing the world's largest wind turbine manufacturer in turbine supply, warranty and service arrangements for transactions with developers active in North America. His project finance experience includes negotiation and documentation of credit and security documents for natural gas baseload and peaking facilities, project agreements for cogeneration facilities as well as documentation of project financings using the 'equity-flip' structure for wind and solar projects involving investment tax credits and production tax credits.

Adam also has experience in general corporate counseling, business formation, mergers and acquisitions and formations of joint ventures. In his mergers and acquisitions practice, he has advised numerous clients in analysis of transactions and preparation of filings with the Federal Trade Commission and Department of

Justice, Antitrust Division, necessary for compliance with the premerger notification reporting requirements of the Hart-Scott-Rodino Antitrust Improvements Act of 1976.

Loren Walker

Associate Director for Research Liaison and Development, University of Massachusetts Amherst

Moderator, University Research Center Directors Panel

Loren Walker is a market-oriented scientific and technical communications professional. He is currently the Associate Director for Research Liaison and Economic Development at the University of Massachusetts Amherst where he also serves as staff director for the university's clean energy research initiative. Loren specializes in research, analysis and translation of technical concepts into accessible, compelling, and persuasive language. Core competency areas include: residential energy efficiency technology, practices and policy; university-led clean energy research; and regional technology-based economic development. Loren earned a B.S. degree from Roanoke College in 1995 and a M.S. from Portland State University in 2000, both in Biology. He serves on the Board of Directors of the Western Mass Green Consortium and is a member of the National Association of Science Writers and the American Association for the Advancement of Science.

Carter Wall

Executive Director, Massachusetts Renewable Energy Trust

Panelist, Financing Renewable Energy Projects in New England

Carter Wall is the Executive Director of the Massachusetts Renewable Energy Trust. In this role she oversees the implementation of the Trust's programs in renewable energy development. Her background is in energy finance. Prior to joining the Trust, Carter was the Executive Vice President of PowerOptions, an energy supply program of the Massachusetts Health and Educational Facilities Authority. Carter has also served on planning teams for large-scale developments with significant energy infrastructure and sustainable development components, such as Harvard University's Allston campus and the City of Chicago's expansion of Chicago O'Hare International Airport. Carter has an AB from Bryn Mawr College and an MPP from Harvard's Kennedy School of Government. She lives in Leverett, MA.

Greg Watson

Senior Advisor for Clean Energy Technology, MA Executive Office of Energy & Environmental Affairs

Moderator, Wind Power Panel

Greg Watson is Senior Advisor for Clean Energy Technology within the Massachusetts Executive Office of Energy and Environmental Affairs and Vice President for Sustainable Development with the Massachusetts Technology Collaborative. He serves as the administration's point of contact for the clean energy entrepreneurial community. As MTC Vice President for Sustainable Development and Renewable Energy, Mr. Watson is also directing the Cape & Islands Offshore Wind Public Outreach Initiative and MTC's Offshore Wind Energy Collaborative (OWC).

Greg comes to us from the Massachusetts Technology Collaborative, where he most recently served as Vice President for Sustainable Development and Renewable Energy. In that capacity, he directed the Cape & Islands Offshore Wind Public Outreach Initiative and MTC's Offshore Wind Energy Collaborative (OWC).

From 1995 to 1999 he served as Executive Director of the Dudley Street Neighborhood Initiative. Prior to that he has been with: Second Nature as its Director of Educational Programs; The Nature Conservancy's

Eastern Regional Office as its Director; and Massachusetts Department of Food and Agriculture as Commissioner.

Prior to that, Greg was the Executive Director of the New Alchemy Institute. In 1983, he was appointed Assistant Secretary for Science and Technology within the Massachusetts Executive Office of Economic Affairs, a post he held until 1989. From 1983 through 1986 he also served as Deputy Director of the Massachusetts Centers of Excellence Corporation. He became the first Director of the Massachusetts Office of Science and Technology in 1986.

Greg serves on the board of directors of Ocean Arks International and the Henry A. Wallace Institute for Alternative Agriculture. He attended Tufts University where he majored in Civil Engineering. He also developed a self-directed program in Environmental Design Science at Campus-Free College in Boston.

John Woods

Vice President of Energy Development, Minas Basin Pulp & Power

Panelist, Bay of Fundy Case Study

John Woods is currently the Vice President of Energy Development at Minas Basin Pulp & Power, a company with a decades-old history of sustainable development in Nova Scotia. In this role, Mr. Woods is able to move past merely talking about the possibilities of renewable energies, to focus on making them a reality. As an electrical engineer, Mr. Woods has spent most of his career in the energy industry. He has been employed as a distribution and transmission engineer with Nova Scotia Power, has acted as a consulting engineer, and is the former Executive Director of the Electricity Consumers Alliance of Nova Scotia (ECANS). He was also a project coordinator of wind energy projects with Ventus Energy (presently known as Suez Energy).

James D. Worden

Founder and CEO, Solectria Renewables

Panelist, Solar Energy

Mr. James Worden is the CEO and co-founder of Solectria Renewables, LLC, a Lawrence based photovoltaics inverter company that designs, produces and distributes products for residential, commercial and utility scale applications. Mr. Worden has been instrumental in the design of the company's inverters from 13kW to 500kW and grown the business from a niche player to an international renewable market supplier. Prior to Solectria Renewables, Mr. Worden co-founded Solectria Corp. in 1989, an internationally recognized developer and manufacturer of electric & hybrid vehicles and components, and served as CEO until 2005. Mr. Worden has over 23 years experience designing and building solar photovoltaic systems, including inverters, maximum power trackers, PV modules, arrays and complete photovoltaic systems. Mr. Worden is a graduate of MIT.

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The Clean Energy Center serves as a clearinghouse and support center for the Commonwealth's clean energy sector.

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APPLIED BIOGENUITY

Massachusetts Hydrogen Coalition

Dedicated to the Success of the Hydrogen and Fuel Cell Industry

The Voice of the Industry

The Massachusetts Hydrogen Coalition is focused on accelerating the success of the hydrogen and fuel cell industry, encompassing industry leading job creation, market adoption, capital formation and infrastructure investment, and research and development. The Coalition accomplishes this by promoting our members, identifying market opportunities, organizing business acceleration forums, locating strategic and investment partners, and pursuing policy initiatives.

Coalition members represent a wide range of activities including hydrogen generation, storage and transport, and hydrogen applications ranging from micro-fuel cells, portable power, stationary premium and remote power and transportation, including internal combustion and fuel cell engines. Hydrogen and fuel cell technologies provide consumers and businesses with superior performing products and services, including: higher performance portable power for consumer electronics and military applications; cleaner, quieter and more compact power stationary power applications; cleaner and more efficient power for automotive and other transportation applications; and more efficient and more environmentally benign methodologies to produce hydrogen from a multitude of sources.

Reap the Benefits from Joining the Massachusetts Hydrogen Coalition

The Coalition works with its members to understand their unique needs and implement programs and initiatives to accelerate their success. Principle membership benefits include:

- **Shape State and Federal Policies** – The Coalition works to align public policies with the Coalition's core mission and members' interests. This encompasses legislative initiatives at state, regional and federal levels.
- **Expand Reach and Visibility** – The Coalition represents promotes its members and their capabilities to potential customers, partners and investors at major international conferences, regional events, and through the Coalition's newsletter and web site.
- **Business Partnering and Professional Association** – The Coalition annually hosts the region's major clean energy conference. holds regular bi-monthly meetings and participates in a range of additional conferences and forums where members increase exposure to investors, industry partners, business opportunities and channel relationships.
- **Accelerated Learning and Market Opportunities** – Several Coalition events are focused on helping members learn about best practices in technology, research and development, business management and financing. The Coalition also alerts members to specific market and business partnering opportunities.

www.MassH2.org

The Massachusetts Technology Transfer Center

The Massachusetts Technology Transfer Center is funded by the Commonwealth of Massachusetts. Its goal is to support technology transfer activities from public and private research institutions to companies in Massachusetts. To achieve this goal, the Center works with technology transfer offices at Massachusetts research institutions; faculty, researchers, and students who have commercially promising ideas; and companies across the Commonwealth.

The Center:

- facilitates and accelerates technology transfer between research institutions and Massachusetts companies;
- promotes collaboration between research institutions and the Commonwealth's technology industry;
- assists in the growth of Massachusetts companies, including startups, by enhancing technological leadership; and
- supports regional and statewide economic development priorities.

The Center supports the commercialization of research technologies through a variety of programs:

The Center provides mentoring to researchers who believe they have a technology that could serve as the basis of a new company. The process includes the development of a business presentation for an expert board of external reviewers.

Commercialization and Entrepreneurial Education seminars and workshops enable researchers to understand the process of commercializing technologies.

Expert technology reviews provide opportunities for Massachusetts research institutes to have external industry experts evaluate technologies and give advice regarding their commercial potential.

Technology Forums allow investors and potential corporate partners to meet with companies formed around technologies developed in Massachusetts research institutes.

www.MaTTCenter.org

www.MaTTCenter.org/virtual-incubator

MaTTCenter@umassp.edu

www.MassTechPortal.org

Startup Company Profiles

About the Investor Pitches

Introduction

The Massachusetts Technology Transfer Center hosts several conferences a year, each focused on a different technology or industry sector. The purpose of these events is to provide a showcase for entrepreneurs with early stage companies to make ten-minute investor pitches to the business community. Each conference also features an exhibit hall of all the startup companies in which a reception is held to maximize networking opportunities.

The pool of applicants to present has grown rapidly since our inaugural Conference on Clean Energy in 2005. Most are based in Massachusetts and have ties to Massachusetts research institutions, but this year we have entrepreneurs from around the country as well as Europe. We have selected as broad a range of companies as possible, from technologies still in the university laboratory to companies starting to sell product; from the most polished and experienced presenters to those who have never presented to the business community before; from the most cutting edge technology to the most mundane processes that still support an innovative business model.

Business and Technology Maturity

The mandate of the MTTC is to help entrepreneurs based in nonprofit research institutions to commercialize their technologies. Thus, we always give priority to applicants from our universities. However, we are also working toward economic development in the state, so we also welcome entrepreneurs already working in startup companies, giving preference to those who are licensing university technology. You will hear investor pitches from full-time professors and from managers who have been commercializing technologies for thirty years or more. Those who have already earned significant venture capital are beyond the scope of this section of the conference but may participate in the Industry Sector Sessions organized by the Massachusetts Hydrogen Coalition.

A few presenters are alumni of prior Conferences on Clean Energy. They are invited to participate only if they have significant business updates to incorporate into their investor presentation.

Clean Energy Categories

We define clean energy quite broadly: any service or product that enables the end user to consume less fossil fuels and generate less carbon dioxide. Any startup company meeting this general criterion has the potential to enhance our energy security and reduce the environmental impact of our energy use. More energy-efficient products are just as important as technologies that provide more traditional renewable energy businesses such as wind farms.

Our categories and some related subcategories are:

- Renewable Energy: Fuel Cells, Hydro, Ocean, Photovoltaics, Solar Thermal, Waste, and Wind technologies
- Alternate Fuels: Biodiesel, Biofuels, Ethanol, and Hydrogen
- Storage: Batteries and Supercaps
- Energy Efficiency & Management: Control Systems, Demand Response, Engine Design, and Green Buildings

Investor Advisory Board

The Investor Advisory Board (IAB) was first created for the 2007 Conference on Clean Energy to help build as strong a pool of candidates for the pitching sessions as possible. We would like to thank the IAB members for volunteering their valuable time and expertise to identify a large pool of startup companies and then to review their applications to pitch and provide recommendations. The quality and quantity of this year's Investor Pitches is a direct result of their contributions to the process.

Investor Advisory Board Co-Chairs
Nick d'Arbeloff, New England Clean Energy Council (NECEC)
Linda Plano, Mass Technology Transfer Center (MTTC)
Investor Advisory Board Members
Jeff Andrews, Atlas Venture
Jerry Bird, Mass Technology Development Corporation (MTDC)
Rob Day, Black Coral Capital
Eric Emmons, Siemens Capital
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Dhiraj Malkani, Rockport Capital Partners
Paul McManus, Boston University School of Management
Peter Rothstein, New England Clean Energy Council (NECEC)
Alexander Taussig, Highland Capital Partners
Bilal Zuberi, General Catalyst

7 Solar Technologies, Inc.

Presented by:
Peter Vandermeulen, President and CEO

Company Overview

7Solar is developing a fully integrated and controllable Solar PV and Solar Thermal module that combines traditional Silicon solar cells with a hot water loop. Our AquaPanel solar module provides electricity and domestic hot water even in cold climate environments where traditional solar panels and solar thermal systems do not perform well. Integrated control software actively regulates the PVT module and uses the building's energy usage patterns and weather- and energy price forecasts to actively minimize energy costs. As a result our solution will provide 40-50% more electricity out of the PV module over the year, while at the same time having a 30% lower installation cost and providing a 50% reduction in heating costs. The ROI for a homeowner is estimated to be 3 to 4 years in stead of the more common 7-10 years for traditional installations.

Our team members have 26 US patents in solar technology and 7 patents pending. We have acquired a small solar module manufacturing line that we are setting up to develop our unique modules. We estimate the US market for our application at 60M residences and 500,000 commercial and industrial buildings. In 2013 the total available market for 7Solar is estimated at 16.5GW.

Officers and Directors

Peter Vandermeulen,
President & CEO

Contact Information

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Newburyport, MA
978.270.3972
peterv@7solartech.com
www.7solartech.com

Product/ Technology

We have acquired and are setting up a small PVT module pilot line (~6MW) to develop our production technology. We intend to outsource high volume manufacturing to a larger strategic partner once initial production has been proven. Our PVT module will be compatible with existing module manufacturing. We are establishing development partnerships with the National Renewable Energy Laboratory, Fraunhofer CSE and with a number of global strategic partners.

In the first phase in early 2011we will deploy standard cells, materials and manufacturing technologies to get our modules certified and to perform our first installations with our web based software. In the second phase we will deploy proprietary module materials that reduce cost and improve electrical and thermal properties. In the third phase we will integrate new cells specifically designed for PVT applications.

We have developed and laminated a demo module and have filed 3 patent disclosures to date with additional disclosures pending in the next few months.

Markets and Applications

The global market outlook for solar PV installations in 2013 is 22GW with a growth rate of 32%. Assuming 25% of the market is residential, 50% commercial, industrial, government, and 25% utility-scale, then the total available market for 7Solar is 16.5GW. To meet the company's growth targets, we need to capture less that 0.5% of the total PV market by 2013. Targets are:

1. U.S. homeowners with high electricity and hot water demand or limited roof space, in states with good incentives for solar PV and thermal systems: CA, NJ, CO, AZ, CT, NY, HI, FL.
2. U.S. Commercial/Industrial and Municipal buildings in these same states.
3. U.S. federal government buildings with high electricity and hot water demand.
4. European residential and commercial market.

Commercial Opportunity

Focus initially on U.S. commercial/industrial (primary) and residential retrofit opportunities.

- U.S. Commercial/Industrial Market - Direct sales for opportunities above 200kW. Partner with Power Purchase Agreement (PPA) firms to provide financing to qualified customers.
- U.S. Residential Market - Indirect sales through distributors, PV installers, and solar thermal installers. Sell complete kits, w/BOS components and control software in a turn-key solution.

Competitive Advantage

Our sustainable advantage comes from the proprietary materials (backskin and encapsulant) in the module and custom PVT cells that will give us an inherently lower module cost (10-15%) and a higher annual electrical production (40-50%) as compared to standard c-PV modules.

Whereas a combined installation of PV and Solar Thermal would cost approximately $8.70/We to install, our PVT system would ultimately cost less than $4.35/We and would produce domestic hot water in addition plus take up 30% less space.

Future Financial Plans

The company is expecting to raise $5.0m for initial development and certification of its AquaPanel modules. A second round of approximately $12.0m is anticipated in 2011 to fund our market expansion.

In the first phase our milestones are

- Develop molded heat exchanger for thermal portion by 4/2010
- Laminate standard materials and combine with a water circulating backing by 7/2010.
- Install Beta system with major customer by 9/2010
- Obtain UL and TuV certification for PVT module by 6/2011

Advent Technologies

Presented by:
Rick Daniels, North American CEO

new england clean energy council

Advent

Officers and Directors

Rick Daniels, N. American CEO
Vasilis Gregoriou, CEO
Joannis Kallitsis, PhD, CTO, Director & Co-Founder
Stylianos Neophytides, PhD, Chairman and Director of Research, & Co-Founder

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Company Overview

ADVENT TECHNOLOGIES has developed a breakthrough in fuel cell technology that will enable a step change in the commercial viability of this long delayed energy technology.

The breakthrough is an advanced high temperature membrane for polymer electrode membrane (PEM) fuel cells, enabling use with a variety of conventional fuels rather than pure Hydrogen, a lower capital cost, and longer and reliable life.

The high temperature approach for PEM fuel cells is a recent development, and will replace low temperature PEM fuel cell technology, as well as phosphoric acid fuel cells, quickly.

The company is in direct competition with only one other commercially achievable high temperature PEM approach (recently acquired by BASF). BASF is currently in a parallel manufacturing scale up. Advent can demonstrate both a superior material and a faster approach to manufacturing and partnering relative to BASF, and will benefit greatly from their activities in market development at the same customers.

Funds will be used to set up US operations, including commercial staff, a US development laboratory, and outsourced manufacturing. The company is seeking a combination of venture capital and corporate partnering funding.

Product/Technology

Prevailing PEM fuel cell technology is low temperature (70 to 100o C) based on a perflourinated copolymer from DuPont and others. PEM technology has not been widely deployed as fuel cell manufacturers have struggled since the 1980's to increase the durability and lower the cost of PEM fuel cells, which exhibit three negative attributes that limit commercial proliferation: contamination by ppm of impurities of Hydrogen (such as CO), membrane hydration issues, and high amounts of catalyst required. Advent's high temperature membrane functions at temperatures of 160o C to 200o C, allowing use with reformed fuels (natural gas, propane, biofuels, and military fuels) without the inefficient and capital intensive clean up common to previous PEM technologies obtain pure Hydrogen fuel.

Markets and Applications

End use markets for high temperature fuel cells are combined heat and power (CHP) at high fuel efficiency for residential (microCHP), commercial, and industrial facilities, portable power, military power, truck and automotive auxiliary power units (APU), telecom backup, bus power, and larger scale CHP. These markets are moving from only several thousand units per year worldwide to several hundred thousand by 2011, cited by Panasonic, BASF, and independent sources. Note this is not a five or ten year forecast, but within 18 months.

Automotive is a large potential long term market, but in the near term Advent is forecasting only demonstration programs. These will provide substantial revenue for a materials supplier like Advent.

The membrane product can also be used in hydrogen clean-up and methanol production. All of these markets – mid scale power and heat generation, handling of gases and liquid fuel purification – are multibillion in scale.

Commercial Opportunity

Advent's go to market strategy is quite straightforward – go to low temperature PEM system designers and fabricators and offer a simpler overall solution. The new membrane is close to "drop in", although the entire system can require simplification and re engineering.

Advent has the key technology to make high temperature PEM fuel cells. It is an attractive joint venture partner, acquisition, or acquisition platform to forward or horizontally integrate.

Panasonic and BASF are the most credible market size estimates given their heavy investment, totaling several hundred million USD in the past 3 years.

Competitive Advantage

Advent has only one competitor in the high temperature PEM market. There are several advantages over the BASF offering: The membrane is available from Advent alone or in a membrane electrode assembly, whereas BASF is supplying stacks at a significant cost uplift; and the Advent membrane is cheaper, easier to manufacture and to handle in subsequent steps, more "tailorable" chemically, and can take stack pressures the BASF membrane cannot.

Electrical testing indicates a superior performance of the membrane and longer life compared to both low temperature and other high temperature materials.

Future Financial Plans

Funding will allow setting up commercial sales and marketing, outsourced manufacturing, and applications laboratories (analytical and formulation laboratories accessible to customers).

The company is seeking corporate partnering for funding, manufacturing of some components, and go to market.

ARRIBA Solar

Presented by:
Soren Harrison, Co-Founder

Company Overview

ARRIBA Solar is a metrology and process control company whose mission is to accelerate solar PV to grid parity, by providing valuable, real-time measurement of the composition and thickness of solar cells in the manufacturing environment. Regardless of technology (thin-film, c-Si), Solar PV manufacturers must reduce the cost per watt of their solar panels. The ARRIBA Solar solution allows manufacturers to control and optimize their manufacturing processes and improve uniformity of thin-film characteristics; this results in increased panel efficiencies (closing the "lab-to-fab" efficiency gap), higher yields, longer uptime, and decreased material costs. All of these improvements allow solar panel manufacturers to decrease their cost per watt, resulting in an annual savings of $1.76M and a payback period of only 3-6 months (for a 50MW manufacturing plant). We estimate the addressable market, specifically for our technology, to be $280-570M in 2015. Our competitive advantage lies in our breakthrough and proprietary technology, and our application of this technology inside the manufacturing environment. The ARRIBA Solar team, comprised of MIT/Harvard scientists and MIT MBAs, seeks $5M in series A funding.

Massachusetts Institute of Technology

Officers and Directors

Dr. Soren Harrison, Co-Founder
Aditya Puri, Co-Founder
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Product/Technology Profile

The ARRIBA Solar solution consists of (in-situ) measurement sensors that go inside the manufacturing lines of solar PV manufacturers, and measurement software that quantifies the measurements for line operators. The core technology (the "ARRIBA" technique) extends accelerator based surface analysis techniques to industrial environments at a fraction of the cost and with a physical footprint that is orders of magnitude smaller. We also provide an annually recurring maintenance contract for replacing consumables, and upgrading the measurement and process control software.

Markets and Applications

Arriba Solar intends to sell our metrology and process control solution to: (1) thin-film manufacturers (e.g. First Solar, MiaSole, Showa Shell) for installation in their primary production lines, and (2) crystalline-silicon manufacturers for installation in their vacuum-based process steps. Based on projected capacity growth of solar panel manufacturers, we estimate the addressable market, specifically for our technology, to be $280-570M in 2015.

Commercial Opportunity

Our target customers are solar PV manufacturers who used vacuum-based deposition processes in their production lines. We plan to “get designed into” large target customers’ production facilities by working closely with them throughout the development of our alpha, beta, and commercial product. As our large customers replicate their production lines, ARRIBA Solar can scale manufacturing and sales up quickly, without having to service a large number of customers.

Competitive Advantage

ARRIBA Solar’s sustainable competitive advantage lies in its proprietary surface analysis technique, including both the hardware and software portions of its technology. The ARRIBA technique outperforms its closest technical competitors, like x-ray fluorescence (XRF), on a variety of metrics. The co-founder of ARRIBA Solar, Dr. Soren Harrison, is the inventor and world’s expert on the ARRIBA technique. Through internal R&D, and established connections to the research community at MIT and Harvard, further breakthroughs will also be realized to broaden our competitive advantage. We will also leverage existing relationships with target customers to drive adoption and sales of the ARRIBA Solar solution. A full discussion of technical and corporate competitors can be found in our business plan.

Future Financial Plans

ARRIBA Solar seeks a Series A investment of $5 million. These funds will be used to demonstrate real-time measurement capabilities on product, for customer testing, and for full development of a commercial product. Other major expenses would include employee salaries, marketing, research expenditures, rent, and operating expenses. We expect this initial funding to enable our first 15 months of operations, which will result in beta testing with customers and our commercial product release. At the end of 15 months, we will seek an additional round of $5 million to build out our sales and service teams, and begin large-scale customer acquisition. We expect revenues of $14 million by the end of 36 months and expect to finance our operations from organic cash flow by the end of 42 months. Our projections indicate we will have revenues of $95.6M in 2015.

CarbonTech, LLC

Presented by:
Daniel J. Shapiro

Officers and Directors

Daniel J. Shapiro, Member
& Project Manager
Michael Japp, Founding Member

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Company Overview

CarbonTech holds the exclusive license to develop and commercialize the patented Cato process to convert municipal solid waste (MSW) , automobile shredder residue (ASR) and tires into a clean coal equivalent fuel and steam while recovering entrapped metals. The unique aspect of the technology is that it uses CO2 and CO as oxidizing agents at a controlled temperature to break down the carbon/hydrogen bonds of the waste streams. Significant benefits to our technology are the consumption of CO2, reduced volume to landfills and the recovery of metals without degradation. A significant advantage of the technology is that it is exothermic so that it requires very little additional energy when the reaction is active. The feedstock materials available to CarbonTech are the 180 million tons of MSW and the 5 million tons of ASR land filled annually as well as the 20 million tons of waste tires not currently recycled. Revenue streams include: waste product tipping fees, utilizing the carbon generated by the process as a coal substitute under renewable portfolio standards, and scrap metal sales.

Product/Technology Profile

The patented Cato Process utilizes a CO2/CO environment at a controlled temperature to break down carbon/hydrogen bonds of waste materials. Metals are recovered in disposed of condition.

Markets and Applications

The primary markets are 180 million tons of MSW, 5 million tons of ASR and in excess of 20 million tons of waste tires.

Commercial Opportunity

CarbonTech will target automobile shredder operators and landfills as customers. In testing, the technology has shown an 80-90% reduction in volume of disposable wastes. In addition, previously disposed of materials are feasible as feed stocks thereby enabling the mining of existing facilities to extend usable life.

Competitive Advantage

Competing technologies, such as pyrolysis, gasification and plasma arc, convert waste streams but do so at high energy consumption and at the destruction or severe degradation of the entrapped metals. CarbonTech is low energy due to the exothermic nature of the process and recovers metals in their disposed of condition.

Future Financial Plans

CarbonTech seeks funding to perform an extended demonstration of the technology to develop the data for process design engineers to scale the technology for a fully functional commercial operation which may include electrical power generating capability.

Cascoda Limited

Presented by:
Bruno Johnson, CEO

Company Overview

There is a growing need for smart energy-efficient homes, offices and industrial plants, and this need is increasingly being supported by legislation. To address this need, a new class of low-power wireless protocol has been developed for the automation and control of heating, air-conditioning, lighting and monitoring systems. These wireless protocols necessitate wireless semiconductor devices. Existing devices however suffer from low data-link reliability and poor battery life. If these problems can be overcome, the market size for such semiconductor devices is projected to be over $1 billion by 2012.

Cascoda's mission is to become the world-leading semiconductor supplier for such wireless control systems. In order to achieve this, Cascoda has patented a new type of radio architecture which will double receiver sensitivity over the current state-of-the-art, whilst allowing for dynamic power control. This will deliver a dramatic increase in data-link reliability and battery life.

Cascoda has an expert team, with a ten year history of technology commercialization. The team formed the core of a NASDAQ listed semiconductor supplier's communications division, and has a proven track record in the design and implementation of complex semiconductors devices. Cascoda seeks to raise US$5 million in first-round funding, in order to complete product development.

Officers and Directors

Bruno Johnson, CEO
Wolfgang Bruchner, CTO

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Product/Technology

Cascoda's radio targets the 2.4GHz band of the IEEE 802.15.4 worldwide wireless standard. This is a standard which defines a low-data-rate, short-range wireless network specifically designed for the applications referred to earlier. It is by far the most commonly used standard for such applications.

Cascoda is developing a single chip radio transceiver, which incorporates a radio, a microcontroller, on-chip sensors and off-chip sensor interfaces. Cascoda's proposition offers the world's highest data-link reliability, dynamic power control, ultra-low power consumption and low cost.

Markets and Applications

Cascoda's radio transceiver can be applied to multiple markets, including industrial control, building control, consumer electronics and medical devices. As the technology enters the growth phase, devices will increasingly be employed in applications with a requirement to operate from a low-cost battery and/or an energy-harvesting power source. In these markets, ultra-low power consumption is a key success factor.

The addressable market for IEEE 802.15.4 wireless semiconductors is projected to be greater than 1 billion US$ by 2012, with a compound annual growth rate of greater than 100% in the ensuing period.

Commercial Opportunity

The market for Cascoda's radio semiconductors is truly global. The supply chain includes chipset providers, module manufacturers, wireless system providers and back-end system providers. The downstream market is dominated by OEMs such as Honeywell and GE Energy in the US, Siemens and ABB in Europe, and NEC and Hitachi in Japan. In order to access such OEMs, Cascoda will partner with module manufacturers and wireless system providers, which have a comprehensive knowledge of the application demands and software systems required within each vertical market segment.

Competitive Advantage

Cascoda's competitive advantage is based upon a new type of radio architecture, which overcomes the problems of low data-link reliability and poor battery life. This architecture delivers a doubling of receiver sensitivity, for no penalty in power consumption or cost. This doubling of receiver sensitivity will greatly extend the range and the data-link reliability over the existing state-of-the-art.

Moreover, Cascoda's architecture is unique in that it can leverage this increase in receiver sensitivity to deliver dynamic power control; the ability to dynamically trade receiver sensitivity for power consumption, in order to maximize battery life. Cascoda has formal intellectual property rights over its radio architecture, through patent protection. In addition, Cascoda has significant know-how and a capability to excel in the field of low-power and wireless semiconductor design.

Future Financial Plans

Cascoda seeks to raise US$5 million in first-round funding, in order to complete product development.

Cleanhydro Inc.

Presented by:
Surendra K. Saxena, Professor

Company Overview

This is a highly profitable venture, which will make the chlor-alkali/PVC plant owners earn up to $50 million per year. Other coal-burning power plant owners with access to the reactant raw material may also profit from this venture. The power plants can be retrofitted with Cleanhydro reactors converting carbon emissions to industrially useful solids. The reactor also produces hydrogen with no carbon emission. Some 48 plants can be retrofitted producing products that can bring over $2 billion in profit annually on the whole. The team at present consists of a professor, a chemist, a physicist and a chemical engineer and a chemical engineer consultant. A manager and an industrial engineer will be added.

Product/Technology Profile

The products include hydrogen that is produced without any carbon emission and other industrially useful products which sell with profit. The products help reduce the CO2 emission from industrial plants that are spewing CO2 in the atmosphere; the use of hydrogen as an energy source further helps in reducing carbon emissions.

Officers and Directors

Surendra K. Saxena, Professor
Dr. V. Drozd
Dr. A. Durygin

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Markets and Applications

The Cleanhydro reactor will use a solid and gases which are byproducts of coal-burning plants. The market for Cleanhydro products should grow many times as the countries such as India and China start using more and more power plants for their industrial needs.

Conventional Power Plants and Chlor Alkali Plants both produce valuable products (electricity, hydrogen, chlorine for PVC and other uses). ***CleanHydro utilizes well-established chemistry innovatively to convert dangerous waste: heat, carbon gases CO and CO2 into hydrogen and sequestered carbon, thereby generating enormous profits while reducing carbon emissions.***

- **~ 50 Co-Located plant sites in US alone**
- **More than175 chlor-alkali enterprises in China** (In recent years, the production capacity has increased exponentially)
- India has barely 15 chlor-alkali plants, which means lots of opportunities (The chlor-alkali industry is on a higher growth trajectory in India. With the expected GDP growth, the manufacturing sector is set to grow at a higher pace and consequently, the demand for basic chemicals shall register a sharp increase).

A single reactor that uses 43,800 tons of caustic soda will sequester 96,360 tons of CO2 and will produce 464,280 tons of soda and 8,760 tons of hydrogen. Estimated 2-year payback.

Carbon Credits:

A carbon tax of $30 per ton of carbon = a gasoline tax of about 9 cents/gal.

Similarly, the tax on coal-generated electricity =1 cent /kWh, or 10 percent of the current retail price. At current levels of carbon emissions in the United States, a tax of $30 per ton of carbon would generate $50 billion of revenue per year

Sale of products

Hydrogen is highly valued for stationary use as a fuel and soda is a highly used chemical in many diverse industries replacing caustic soda in many cases.

Commercial Opportunity

The target customers are coal-burning power plant and chlor-alkali plant owners who will benefit by the profitable sale of the products from the retrofitted reactors. After the successful completion of the pilot plant, demonstrations at the site will be conducted by inviting the companies. A web-based live demo will be also available for remote viewing.

Competitive Advantage

This is one technology that does both reduce CO2 emission as well as produce hydrogen. The reactors are of a flexible design such that the amount of products can be adjusted to market conditions. An investment in CleanHydro™ Reactor Technology will result in a profitable and scalable business that will produce low-cost and emission-free hydrogen, pervasively, through a modular approach, while at the same time sequester carbon dioxide into safe and environmentally friendly byproducts that are in great demand in the industrial marketplace. The reactor can use the reactions flexibly and produce hydrogen with or without carbonate or carbonate and bicarbonate without hydrogen.

Future Financial Plans

Investment Opportunity I: Pilot Plant

CleanHydro is raising an initial $3 million to complete the design and the assembly of a compact CleanHydro™ out-of-the-lab reactor (CleanHydro Pilot Plant) to demonstrate commercial application of the technology as the first step to an industrial sized system and a scalable business model.

Investment Opportunity II:

After the completion of the pilot plant project, and with an additional round of financing, CleanHydro will work with the plant owner in assembling industrial size reactor systems at the customer's site. The owner will be responsible for all equipment and construction cost including the initial inventory of reactor inputs. The average CleanHydro industrial system will produce approximately 13,000 tons of hydrogen annually with the following financial results:

Industrial Size Reactor:

Reactor Cost: $28 Million (2 yr or less payback)

Gross Profit: $30,268,000 (annual sale of hydrogen, byproducts & carbon credits) Expenses: $ 3,500,000 – maintenance $ 4,000,000 – labor + burden $ 2,700,000 – G&A and other;Annual EBITDA: $20,068,000.

This reactor may also be used flexibly for only carbonation with larger profit if hydrogen production is not required or produce hydrogen only or only sequester carbon.

Cleantech BioFuels, Inc. (wait-listed)

Presented by:
Michael D. Kime, Chief Operating Officer

Company Overview

Our technology makes biofuel and bioenergy efficient. We are able to transform the existing waste delivery and disposal infrastructure into a means for producing a readily available supply of biomass for energy production at predictable prices and on a year round basis. The technology is currently working at a 500 ton per day plant in Australia and is ready for implementation in the United States today.

Product/Technology Profile

Our proprietary Biomass Recovery Process cleans and separates raw municipal solid waste into its component part,, producing a clean homogeneous cellulosic biomass feedstock for energy production and recovering metals and plastics for recycling.

Officers and Directors

David Bransby, PhD, Director
Michael D. Kime, COO
Edward P. Hennessey, Director and CEO
Jackson Nickerson, PhD, Director

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Markets and Applications

On a national scale, the United States generates 250 million tons of MSW annually, and after recycling, about 90 million tons, or 36%, is available as cellulosic material that could be used as a bioenergy feedstock. The choke point in relation to taking advantage of this opportunity is the absence of a cost-effective, environmentally compliant process for recovering this cellulosic fraction from mixed MSW. CleanTech Biofuels (www.cleantechbiofuels.net), a company based in St. Louis, MO, has made excellent progress in developing a transformational technology that can overcome this hurdle.

Commercial Opportunity

We project that our cellulosic feedstock generated from MSW can be produced for zero to $20/ton (depending on tipping fee), compared to $40 to $70/ton for forestry and agricultural feedstocks. This represents a dramatic reduction in feedstock cost, and the technology could play an enormous role in rapidly launching the bioenergy industry (both cellulosic biofuels and biopower).

Competitive Advantage

High cost ($40-$70/ton) and logistical challenges related to coordinating supply of distributed forestry and agricultural feedstocks for production of cellulosic biofuels and biopower are major choke points for the entire cellulosic bioenergy and biopower industry. The technology barriers that are causing the cost "choke points" are inefficient production, harvesting, preprocessing, storage and hauling technologies associated with forestry and agricultural feedstocks.

At the MSW level, in cases where separation and recycling is done to recover biomass resources, it currently is done by hand separation at the household and separate curbside pickup, or by hand after delivery to a central point. Both options are extremely inefficient and costly, and the latter involves a very unhealthy, high risk and unpleasant (due to odor) work environment for hundreds of low income laborers.

CleanTech Biofuels has acquired and improved a technology that accomplishes this goal in an efficient and clean manner. The process involves loading bulk MSW into a rotating vessel in which the material is subject to treatment with steam under moderately elevated temperature and pressure. Following relatively short residence time, the contents of the vessel are removed and screened into the cellulosic fraction, plastics and metals. The cellulosic product has a compost-like appearance, is sterilized, producing none of its original odor, and is suitable for compression into pellets or briquettes, or direct delivery to facilities such as boilers, gasifiers and liquid fuel production plants. Processing costs at a 1,000 tons of MSW per day plant are anticipated to be about $20/ton of MSW. Therefore, if tipping fees are above $20/ton (national average tipping fee is ~$35/ton), the cellulosic material can be produced on site at negative cost. Projected capital costs for a facility that will process 1,000 tons of MSW per day are ~$22 million.

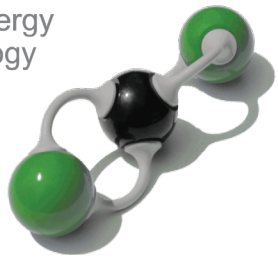
Future Financial Plans

We are seeking funds to develop projects using our technology. The amount required will vary upon project size and the financing structure.

Coincident, Inc.

Presented by:
Jason Hanna, President & Founder

coincident
smart energy technology



Company Overview

Coincident is a Massachusetts technology start-up that provides advanced metering and energy management products/services for consumers, small businesses, and utilities.

Product/Technology

Energy consumers need smarter devices and appliances to participate in new utility programs and achieve the financial and environmental benefits promised by smart metering initiatives. Unfortunately this new market is uniquely complex, and not particularly well-suited for existing retail or utility business models.

The Coincident Intelligence Engine™ forms the basis for a new type of online marketplace - one that brings together consumers, utilities, manufacturers, and service providers to streamline the discovery, procurement, and installation of intelligent communicating devices and appliances.

Officers and Directors

Jason Hanna, President & Founder
John Bryan, Senior Advisor
Kat Donnelly, Senior Advisor
Robert Cooper, PhD, Senior Adviser
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Coincident has also developed a product for residential and small business consumers - the Coincident Energy Management Appliance™. It provides an interoperable platform that seamlessly integrates smart meters, programmable thermostats, and energy-aware communicating devices of differing technology standards. It's powerful software platform provides an intuitive, web-based interface that allows for secure real-time monitoring, management, and control via any web browser or smart phone.

Markets and Applications

Electric utilities and government entities will spend over 100 Billion US Dollars by 2015 to deploy smart meters to over 400 million homes and businesses worldwide. With these investments, utilities expect to achieve operational efficiencies and the ability to implement dynamic pricing, demand response, and load management programs for their customers.

Leading utilities, industry professionals, and manufacturers have been working together for some time to develop standard protocols for connecting utility-owned advanced metering infrastructure to in-home networks of consumer-owned appliances and devices. These groups understand resulting benefits for utilities and consumers are not achievable unless open and interoperable products are available.

This market is typically classified as home-area networking (HAN). As evidenced by the number of competing standards, market entrants, and investment activity, this segment appears to be on-track to be a multi-billion dollar opportunity within the next five years.

Commercial Opportunity

Our retail model is based on an intelligent engine that matches consumer information to utility capability – determining the devices and appliances that are operable on any particular network and making them available for purchase. Coincident profits from the sale of devices and appliances through retail markup, and additionally profits by connecting consumers with energy professionals in their area that can assist with the installation and configuration of these products and services.

The revenue model for the Coincident Energy Management Appliance™ is based a one-time product sale coupled with a recurring monthly service fee. The product has been designed at a price point that provides return on investment in less than 12 months.

Because of the need for utility integration, Coincident provides a free tool for utilities to help them connect HAN-enabled devices to their networks and minimize customer service calls. It is expected that as the market matures there will also be an opportunity to offer an enterprise software product to utilities that assists with management of these devices.

Competitive Advantage

We believe there is a significant advantage in being the first company to create a successful retail marketplace for HAN-enabled products.

Our extensive market research, database of utility AMI programs, and experience with online commerce and business-to-business systems allows us to quickly bring our solution to market and also provides us a sustained competitive advantage.

Complimenting our online marketplace is the Coincident Energy Management Appliance, which we believe offers a number of differentiating features and capabilities:

- Use of off-the-shelf hardware components and open source software frameworks allows us to manufacture and produce a very low-cost product.
- Modular, field upgradable design supports widest range of vendors, devices, appliances, and protocols.
- Innovative combination of hardware and software enables engaging features and presentation of real-time information via web browser or mobile handset.

We also believe that our inclusion of home energy auditors and retail electric providers in our go-to-market model allows us to place more products in the hands of consumers than could be otherwise achieved by selling only to utilities or through traditional retail channels.

Furthermore, our current leadership team collectively brings great start-up experience, financial and business development strengths, expertise in technology systems, and research-based insights into consumer and human behavior.

Future Financial Plans

Coincident is privately funded and finances ongoing product development through consulting and professional services engagements with utilities and technology companies. Currently we are seeking a first round of external financing in the amount of 500,000 USD to put a dedicated team in place, accelerate our product and online marketplace development efforts, and further develop our network of customers and partners.

Cormarent Limited

Presented by:

David McSherry, CEO and Founder

Company Overview

Cormarent Limited is a renewable energy technology start up company with a novel concept for the generation of electricity from tidal stream currents. The device has a number of features which will enable it to leap frog existing technologies to become a universal technology for deeper water applications, where the majority of tidal stream resource exists.

The world market for tidal energy devices is estimated by Cormarent to exceed USD 60 billion and global annual power sales revenue exceeding USD 10 billon.

Phase 1 laboratory tests and CFD studies have been completed in conjuction with the University of Plymouth which validated the core assumptions of the concept.

Officers and Directors

David McSherry, Director & Founder
Jane McSherry, Director
Peter Davies, Company Secretary

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A further two phases of development are required to get to commercial role out:

Phase 2 will complete design optimisation and deploy a scale protype in the sea and will take 2.5 years to complete.

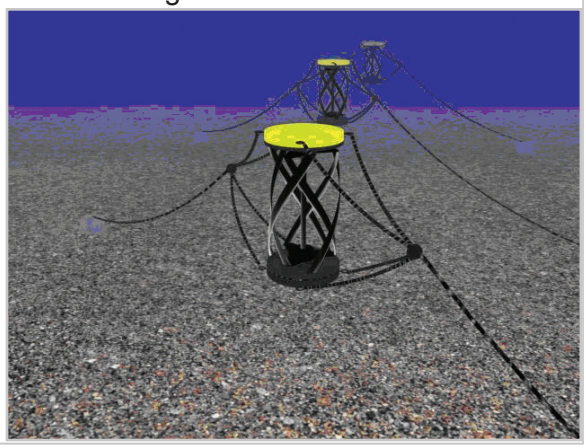
Phase 3 is will design and build a commercial scale demonstrator unit and undertake commercial development, consenting key areas of sea bed and establishing joint venture partnerships with utility companies in Phase 3.

Product/Technology

The Technology is a buoyant, moored device capable of being deployed in waters of 40M depth or more with simple, low cost vessels. It has very few moving parts - no trimming controls and a direct drive generator. These features reduce the risk of mechanical failure and thereby increase its availability. It employs counter rotating rotors, which enable the device to be deployed without the need of a rigid foundation. The device can be recovered to be serviced onshore. The Cormarent technology provides a robust, reliable and simple tidal stream generator with a low life time cost of power.

Early tank trials and Computational Fluid Dynamic modeling completed by Cormarent with the University of Plymouth and industrial partners Gurit Limited and BMT Cordah Limited have validated the core concept principles.

An artist's impression of a Cormarent array is given below.



Markets and Applications

The UK tidal stream resource has been estimated to be 18 TWh/yr by the UK Carbon Trust. It represents around 15 -20 % of the known global resource.

In the U.S.A. there is an estimated 14 - 20 TWh/yr of tidal stream capacity that could be economically exploited with a similar estimate for Canada. The world tidal stream resource has been estimated at between between 90 and 120 TWh/yr. Exploiting the global resource would require in the order of 25,000 to 35,000 units with a nominal rating of 1 MW.

The value of equipment sales could exceed USD 60 billion.

The value of power sales in the UK alone could exceed USD 1.2 billion per annum.

Commercial Opportunity

Cormarent will develop the technology in parallel with a commercial development program. The aim is to initiate the consenting of suitable sea areas to enable a smooth progression from Technical development to commercial exploitation. Cormarent will seek to develop joint venture partners in the UK and USA for the development of these projects from the utility sector and renewable energy project development community.

Competitive Advantage

Cormarent offers a combination of factors which make it unique:

- Benefits of Cormarent
- Simple = fewer breakdowns increased sales
- Submerged = no storm damage and easier consenting
- Buoyant = towed to shore for repair lower life-cycle costs
- Moored = low cost installation & decommissioning
- Effective = increased sales revenues

Future Financial Plans

Cormarent is seeking investment and development partners for the completion of Phase 2 and Phase 3 of its development program. Investment will be drawn down against key milestones.

Phase 2 will complete design optimisation and deploy a scale protype in the sea. The cost for Phase 2 is estimated at USD 7 m and will take 2.5 years to complete.

Phase 3 is predicted to cost USD 11 m and will take 2 years to complete. It will design and build a commercial scale demonstrator unit. Cormarent will also undertake the commercial development, consenting key areas of sea bed and establishing joint venture partnerships with utility companies in Phase 3.

EHK North America/ Electronic Housekeeper

Presented by:

Roselyn Romberg, President, North America

Officers and Directors

Frans Merrild, CEO & Founder
Thomas Larssen,
Board Member (Canada)
Wayne Davis,
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Company Overview

Electronic Housekeeper (EHK) is an infrastructure and applications provider that makes buildings SMART. It is an affordable, intelligent energy and resource management technology that makes it easy for buildings and residences to

- Reduce energy and water consumption by 15-40%
- Cut their carbon footprint significantly
- Use energy more efficiently
- Participate effectively with Demand Response programs
- Save money

Product/Technology Profile

Electronic Housekeeper (EHK) is Smart Home/Smart Building system that wirelessly monitors resource use and controls building systems (HVAC, lighting, security/alarm) and devices (appliances, lights) to reduce consumption by up to 40%. It combines easy-to-use automation and control with sophisticated data analysis capability and full connectivity.

Markets and Applications

EHK wants to be the Smart Grid "inside the building" system, partnering the "outside the building" utilities and Smart Meter makers as they upgrade the 320 million residential (plus commercial) electric, gas, and water meters in the US. This $50 billion upgrade will allow users and utilities to use resources more efficiently, manage peak demand, and save money.

Where installed, smart meters have already achieved peak demand savings of 6-10%. According to the Electric Power Research Institute (EPRI), in-building/in-home Smart Grid technologies reduce energy consumption up to 25%, saving $325 billion. EHK's technology can cut consumption significantly, even with conventional meters and appliances. In the EU, EHK has reduced consumption by 15-40% with no noticeable effect on comfort or use, resulting in a payback period of 6 to 12 months or less.

Commercial Opportunity

Our key verticals include:

- Smart Grid players
  - Utilities (~3500, US and Canada)
  - Smart Meter makers (top 10)
- Real estate development/property management companies (both new construction and energy efficiency retrofits)

- Educational systems (~4500 US and Canadian universities and state college systems)
- Technology companies developing energy use "dashboards," intelligent appliances, wireless intelligent outlets and switches, etc. (top 15)
- DOD military bases in the US (~200), slated for energy efficiency upgrades by 2015

Competitive Advantage

We have five key competitors in the North American market. Our competitive advantages include:

- Cost: Lowest entry price for starter system
- Versatility: Works with adapters available through standard retail outlets. Manage up to 200 devices. Systems can be "chained" to scale.
- Standard-agnostic: Works with Zigbee, Z-Wave, WiFi, HomePlug, RS232/485, Bluetooth
- Ease of use: Touchscreen icon technology, web-enabled dashboard, iPhone/mobile app
- Functionality:
  - Monitors consumption and manages usage
  - Tracks and controls electricity and gas and water
  - Works with smart and conventional meters
  - Operates conventional appliances and adapters and intelligent appliances, wireless adapters, and smart home devices
  - Controls individual units (lamps, air conditioners) and systems (central air conditioning, indoor/outdoor lighting, security/alarm, home entertainment)
- Extra features: Fully IP-enabled, with VoIP, SMS, satellite radio/TV, and Internet capability

Future Financial Plans

We are looking to raise $25 million to

- Establish the US-based North American company ("NA") (4Q09)
- Move functions of corporate headquarters from Denmark to Massachusetts (1Q10)
- Establish the Danish company ("EU") as a wholly-owned subsidiary (4Q09-1Q10)
- Transfer all IP rights and international licenses to NA (4Q09-1Q10)
- Build out NA Sales and Marketing capabilities for each vertical channel (1Q-4Q10)
- Expand Technical and Customer Support capabilities (global) (2Q10)
- Secure 1st NA customer/partner project or pilot (1Q10)
- Finalize contracts with Germany, Bahrain, and China. Accelerate negotiations with Dubai, UAE, Scandinavia, UK, South Africa. Follow up with contacts in UAE, Israel, and Japan. (1Q10)
- Secure 2nd and 3rd NA customer/partner project or pilot (2Q10)

Three-year financial projections are included in the business plan summary.

Electric Pipeline Corporation

Presented by:
Ron Todd, CTO and Director

Company Overview

Massive wind and solar energy farms aren't being built because the transmission lines to bring their power to market don't exist. Without new transmission lines, wind and solar energy can make only a small contribution to our energy economy. Overhead power transmission lines are problematic both aesthetically and environmentally, and are virtually impossible to install in some corridors. An underground transmission option with at least the transmission capacity of the best state-of-the-art overhead line is needed. An $85B/year market is anxious for a solution.

Electric Pipeline Corporation has patent-pending technologies that solve this problem. We have developed methods to put very high capacity non-superconducting high-voltage DC power lines into underground pipelines; similar to those that currently move natural gas around the US. Key portions of our technologies address new high-voltage insulators, joint reliability, and waste heat removal. We will offer substantially higher capacity and lower cost than existing underground alternatives, and do not have the technology risks of the proposed superconducting solutions.

EPC is in partnering talks with leading international power transmission companies, and has assembled a world-class team of electric utility industry and technology advisers, led by a seasoned management team. We are seeking $3.5M in "A" round funding to support a technology demonstration.

Officers and Directors

Roger Faulkner,
Chief Scientist & CEO
Ron Todd, CTO & Director
Eric Hilman, CFO
Mike Jesanis, Director
Brian Dingman, Director

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Product/Technology

Working through industry partners, EPC will subcontract and/or license the manufacture of high-power (10 GW and up), high voltage (800 kVDC) electric power transmission line components that install underground, and are nearly invisible. Similar technology has already been field proven in the nation-wide network of underground natural gas pipelines. Our patent-pending technologies address the technical and logistical hurdles of reliably insulating very high DC voltages, transporting and installing massive conductors, waste heat build-up in thick insulation, thermal expansion, and splice reliability; among others. By using proven technology (in novel ways), such as very large conventional aluminum conductors instead of superconductors, we avoid the unnecessary risk and potential operational headaches of alternate approaches, and expect to achieve a compelling cost.

Markets and Applications

The current worldwide market for electric power transmission equipment is $85B/year, and growing. It is a priority of the Obama administration to modernize the US power transmission infrastructure. Increased transmission capacity is key to elevating the penetration of renewable power sources into the US grid, and averaging out the intermittent production of wind and solar farms by combining their outputs with other farms elsewhere in the country where the sun is shining or the wind is blowing. EPC's approach to this vast market is through partnerships. EPC has already received a warm reception from several large, key, multi-national companies that currently service this industry or stand to gain significantly by the success of EPC's approach. It is through these partnerships, enabled by EPC's technology base, that EPC has a viable way to participate in this huge market.

Commercial Opportunity

Our initial market will be to provide underground transmission line segments on new high-voltage DC transmission links that are currently in planning, through regions that will not approve high-voltage overhead powerlines. We have identified several such opportunities in the network upgrades planned by the New York Power Authority and the Midwest ISO.

Competitive Advantage

Moving large amounts of electricity (for several million homes) with overhead power lines requires numerous gargantuan towers. Because they are unsightly and for environmental and safety concerns, it is nearly impossible to get new lines approved in populated and environmentally sensitive areas. It is impractical to send AC power farther than a fraction of the width of the US (and much less if underground), and HVDC cables are limited to a size small enough to fit on a reel that is truck transportable. Existing underground transmission products are several times more expensive than EPC's solution, and don't scale to the larger sizes the US will need in the future. EPC's solution is capable of scaling to very large capacities (>200 GW), while giving a low loss (<5%), cost competitive way to move large amounts of power from coast to coast.

Future Financial Plans

EPC is seeking a $3.5M "A" round investment to fund the development and lab-scale demonstration of its technologies, and to cement its partnering activities.

Electric Truck, LLC

Presented by:
Peter Hughes, CTO

Company Overview

Electric Truck intends to design, prototype, test & license to transportation OEM's and/or their suppliers novel electromagnetic shock absorbers and supporting equipment that provide equal or superior ride characteristics while simultaneously recovering useful energy whenever the vehicle is in motion. The company holds the exclusive worldwide rights to US Patent # 6,952,060 B2 issued on October 4, 2005 entitled, "Electromagnetic Linear Generator and Shock Absorber" assignee: Trustees of Tufts College. The shock absorber consists of magnets & coils optimally configured for transit applications including autos, trucks, trains and ships. We are at the proof of concept phase and have attracted interest from several of the major auto manufacturers.

Officers and Directors

Chris Moe, CEO
Peter Hughes, CTO
Woody Neeley, Founder &
VP of Business Development

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Product / Technology

Shock absorbers based upon hydraulic and pneumatic technologies have been commonplace in transit applications for decades. The our electromagnetic shock absorber provides a direct replacement for conventional shocks in that it provides the same or better ride quality while at the same time recovering some of the energy associated with the motion of traveling along a roadway. Elimination of problematic hydraulic shocks will improve reliability and eliminate the environmental challenges of hydraulic fluid leaks.

In an electric / hybrid vehicle the electromagnetic shock will also act as a range extender by virtue of the energy recovered by the shock which will typically be directed to the battery pack. In conventional vehicles the recovered energy can be used by the vehicle electrical loads and may provide for a reduction in component capacities & costs.

The electromagnetic shock works very much like a linear motor/generator. It is based upon the concept of moving a coil through a magnetic field resulting in current flow in the coil and voltage developed across the coil . In our case the coils are arranged in a definitive configuration and are fixed. The toroidal magnets are also oriented in a distinct manner / configuration and the motion is provided by the vibration and bumps as the vehicle travels along the road surface. There are inner and outer coils and magnets configured in stacks and the shocks interface with the vehicle attachment points exactly as conventional shocks. These shocks can be scaled for use with autos, trucks, trains, subways and/or ships.

Markets & Applications

Approximately 75 million vehicles are produced globally each year which represents a minimum of 300 million shock absorbers. At the automotive OEM level the market for shock absorbers is estimated to be $2-5 billion annually. As vehicle weight and size increase the application of electromagnetic shock absorbers becomes more advantageous and cost effective. Class 8 trucks are a primary target with energy recovery potential as high as 8.9% expected. The North American Class 8 truck market exceeds 100,000 units per year.

Commercial Opportunity

We are currently adapting a ¾ ton pickup truck with prototype electromagnetic shocks as a proof of concept. General Motors invited Electric Truck to partner with GM to develop this important shock technology through a DOE funded grant for car & SUV applications. We are in discussions with several OEM's regarding other applications & opportunities. At least one major transit authority has expressed interest in evaluating rail applications of this technology. Beyond the proof of concept / demonstration phase we expect to sub-license our designs & technology to selected global shock manufacturers.

Competitive Advantage

There are two known sources of hydraulically based energy recovery shock absorber technology. We believe that such hydraulic systems are less efficient and potentially less cost effective than an electromagnetic shock absorber. The Electric Truck shocks require no maintenance and will last the life of the vehicle. The electronics (Power Conditioning Module) associated with the electromagnetic shock will provide a superior degree of active suspension control which provide for tailoring shock performance based upon the road conditions and vehicle characteristics (loaded versus unloaded).

Future Financial Plans

Electric Truck is seeking a $3M funding commitment over a three year period to support operations, product development, marketing, intellectual property expansion , prototyping & testing. The flow of investment capital will be milestone gated with an initial minimum round of $500K.

Energy Efficiency Monitoring and Assessment Program (EEMAP)

Presented by:
Ravi Malhotra, Founder & CEO

Officers and Directors

Ravi Malhotra, Founder & CEO
Vic Ahmed, President

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Company Overview

EEMAP Inc. has developed an innovative software solution which simplifies the training, data entry, analysis and reporting for energy management of small commercial and residential buildings. EEMAP plans to become the portal of choice for its target market and help its customers reduce their energy consumption for the rest of their life. Energy management is the fastest growing industry both in terms of jobs created and wages, with 78% growth projected through 2016. Our estimated market size is $10B/year. We have proprietary algorithms that convert the art of energy auditing and management into a science and allow the computer to do the work, better, faster and cheaper than any person. Our team has a good mix of theoretical and practical experience in this space along with seasoned entrepreneurs in the IT space. We are looking for seed funding of up to $1M to bring our product to market.

Product/ Technology Profile

EEMAP's ability to create a building model and find optimal energy solutions within budget decreases the experience needed and time needed for audit inspection and reporting. Benefit: 1) training new auditors becomes faster and easier, 2) labor costs decrease/time decreases – much of analysis is done by the software, 3) making sense of results and next steps in solution implementation becomes a streamlined process for consumers through an online portal, 4) access to software and online tools to start and run an auditing business decreases initial capital investment, 5) HERS and Energy Star certification offered online, 6) integration with Smart Grid devices for ongoing monitoring of energy use that leads to control of energy consumption.

Markets and Applications

According to US Census Bureau statistics, the management, scientific, and technical consulting industry, which includes the environmental and energy efficiency consulting field, is the fastest growing industry both in terms of jobs created and wages, with 78% growth projected through 2016. The market segment we are initially pursuing is energy auditing contractors hired by utility programs and auditors/aspiring auditors in states/cities with government weatherization/efficiency programs and utility and/or state energy efficiency incentives. With $5 billion allocated towards weatherization through ARRA; 1057 rebate, tax, loan and other incentive programs through states and utilities to date; and market costs for audits averaging $400 (residential) and $10,000 (commercial); we estimate the gross residential and commercial markets to be $48 billion and $47 billion respectively.

Commercial Opportunity

EEMAP's customers will be existing/aspiring energy auditors who execute residential and small-scale commercial energy audits. EEMAP will offer a software training course in order to grow its customer base, assuming the auditor will use EEMAP software for a fee after training. Because many aspiring auditors will come from construction, engineering, and other technical as well as non-technical backgrounds, EEMAP will reach its target customers through diverse channels: 1) online/print advertising targeted towards the construction, energy, and "green" products and services industries, 2) partnerships with utilities offering subsidized audit programs for which they seek contractors, 3)relationships with higher education institutions with engineering, environmental/sustainability, and urban development degree programs 4) partnerships and promotions through employment centers and workforce development centers.

Competitive Advantage –

EEMAP provides a full service package to auditors that minimizes costs, speeds up the auditing process, and simplifies training. Homeowners use the software post-audit to make sense of recommendations and quickly implement solutions. The audit results are accurate and verifiable, and the reporting mechanism engages the building owner in ongoing interaction through the web portal and, later, Smart Grid device management.

Future Financial Plans

EEMAP is raising up to $1M for this round of funding to further develop its product and bring it to the marketplace in 2010. This software will make energy management a readily available and affordable service for small commercial and residential building owners as well as create jobs nationwide. EEMAP plans to generate revenues of $100 million in 2015.

Feed Resource Recovery Inc.

Presented by:

Shane Eten, Co-Founder, CEO & President

Company Overview

Feed Resource Recovery Inc. (Feed) provides the Food Industry customized waste-to-energy solutions. Feed's patented process allows customers to turn a previous liability into a valuable source of disposal savings, clean energy, organic fertilizer and positive PR.

While a majority of the waste stream generated by the food industry contains high energy yielding organic material, it can not be converted into energy unless it's separated from the contaminants & packaging. Feed's patented process integrates three proven practices, one from the pulp and paper industry (waste contaminant removal), one from the wastewater treatment industry (high-rate biogas production) and one from the distributed energy generation industry (Biogas-to-Electricity CHP).

This proprietary combination of proven technologies allows Feed to located systems at or near the source of the waste generation. In many cases Feed utilizes existing customer infrastructure to consolidate large volumes of waste. Creating a significant competitive advantage by eliminating infrastructure & costs associated with traditional waste disposal methods. Feed is creating barriers to entry around this decentralized approach using specific forms of intellectual property. This includes exclusive technology partner agreements, three patents, trade secrets and letters of commitments from 2 of the 3 largest food retailers in the US.

Officers and Directors

Shane Eten, Co-Founder, CEO & President
Ryan Begin, Co-Founder & VP Engineering
Nick Whitman, Co-Founder & VP Operations

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Product/Technology

Regional supermarket chains (300 stores) pay over $4M to dispose of 40,000 tons of food waste / year. With States starting to ban food waste from landfills, supermarkets (1.46% profit margins) need and are looking for disposal alternatives. Feed provides this alternative using a patented waste-to-energy process capable of efficient converting packaged & unpackaged food waste into electricity and fertilizer. Providing customers with a mechanism to unlock hidden value from a currently discarded raw material. Instead of $4M+ to get rid of food they already purchased, Feed allows customers to turn this waste into enough electricity to power a typical distribution center or manufacturing plant ($3.5M in electricity).

Markets and Applications

The U.S. generates 32 million tons of food waste per year. Traditional waste disposal providers get paid $2.4 billion to bury 97% of this waste in landfills – where it releases a greenhouse gas that is 25 times more potent than CO2. At an average “all-in” disposal cost of $80/ton and an average electricity price of $.09 kWh, this represents a $4.5B market opportunity. As renewable energy, carbon and fertilizer markets continue to trend toward the prices seen in Europe, our market could triple in the coming five years.

Commercial Opportunity

Feed partners with large supermarkets and food processors to create customized solutions for the cost-effective management of food waste. Each of these customers has multiple locations where our solution can be implemented. To increase customer adoption rates feed will develop a pay-toplay model by continuing to focus efforts on increasing service revenue to provide customer same solution at a lower upfront costs. We are deep in the sales pipeline with five of the top ten supermarket chains in the U.S., two of which have already signed letters of commitment for projects located in Southern California & The Northeast.

Competitive Advantage

Traditional waste service providers (i.e. Waste Management, Local Composters, etc...) and emerging biogas technology providers are servicing or entering the market using centralized waste disposal practices. Rather than compete with this collect, haul and landfill/process model feed utilizes the customer’s existing distribution network to collect and consolidate waste.

Due to odor pollution, wastewater generation and large square footage requirements compost & landfill operations are unable to locate facilities anywhere near waste generators. In Addition, composters and most biogas technologies are unable to handle the highly-contaminated waste streams Feed’s system was specifically designed to process.

Future Financial Plans

Funds will support the development and completion of Feed’s first full-scale commercial system, and the first system of its kind in the US. A full-scale system allows Feed to prove the business model and technology. As a result, senior debt becomes a viable alternative for system financing. This quickly increases the capital pool and customer base for additional systems. Funds will directly support the implementation and improvement of our core technology. Specifically, use of funds will include: working capital, project development, technology development, patents and value engineering

Free Flow Power Corporation

Presented by:
Daniel Lissner, General Counsel

Company Overview

Free Flow Power is an experienced multi-disciplinary team with the mission to grow hydropower, the most proven and cost-effective form of renewable energy, though environmentally sensitive methods. With its integrated approach to engineering, licensing, and financing, FFP is uniquely positioned to lead the industry as hydro grows from 7% to a projected 20% of US energy generation. FFP's three-stage business strategy involves generating near-term revenue and long-term growth potential by: i) acquiring, improving, and managing existing hydro assets; ii) developing hydro on existing non-hydro dams; and iii) developing hydrokinetics to harness the flow of rivers and oceans to generate electricity without constructing new dams.

FFP is the US's largest developer of hydrokinetic projects, including a cluster of 55 sites on the Mississippi River that are in the environmental study phase and have the capacity to generate over 1,000 MW. FFP has developed and is manufacturing the second generation of its fish-friendly SmarTurbine™ hydrokinetic generator system, the first generation of which has undergone tank-based and live-river testing. FFP recently was awarded a DOE Advanced Waterpower grant for a hydrokinetic demonstration project, and we are seeking to raise additional funds from institutional investors at the corporate level and for specific hydro asset acquisitions.

Officers and Directors

Daniel Irvin, President and CEO
Christopher Williams,
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Henry Dormitzer,
Chief Financial Officer
Daniel Lissner,
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Product/Technology

The FFP SmarTurbine™ hydrokinetic generator is a rim-driven ducted system with a single moving part. It is designed to be part of an integrated system which includes cost-effective approaches to installation, maintenance and power conversion and which emphasizes mass production and large-scale deployment. The design is applicable to a wide range of environments including flows that are unidirectional (rivers and currents) and bi-directional (ocean tides), and to conduits and canals. FFP is developing over 55 Mississippi River hydrokinetic projects for which the SmarTurbine™ will be the exclusive licensed technology.

Markets and Applications

Hydropower is the most proven and cost-effective form of renewable energy, and it once accounted for 40% of US energy generation. Hydropower has not grown in recent decades due to lack of incentives and concerns about the environment effects of building dams. However, recent policy changes have positioned hydropower to grow, by some estimates, from 7% to over 20% of the US energy market, without creating negative environmental consequences.

Important legislative changes include the recognition (in 2005 and 2008) of new hydro on existing dams and hydrokinetics as renewable energy eligible for a 1¢ production tax credit, passage of a 30% investment tax credit (in 2009) putting hydro on par with other renewable energy sources, and regulatory reforms that permit efficient licensing of hydro projects by the Federal Energy Regulatory Commission.

Commercial Opportunity

To capitalize on the projected growth in hydropower, FFP is focused on three areas: i) optimizing output at existing hydro facilities, many of which are underperforming significantly; ii) developing new hydro facilities on existing dams, 97% of which currently do not generate electricity; and iii) facilitating mass production of FFP's SmarTurbine™ and achieving economies of scale by developing 1,000 MW of hydrokinetic projects in the Mississippi River, for which FFP has obtained permits and exclusive priority to file license applications.

Competitive Advantage

FFP is the only company in the hydro industry to integrate core competencies in financing, regulatory processes, and engineering, while disintermediating consultants whose interests are not aligned with cost-effective management of projects or licensing. FFP's diversified approach to capitalizing on growth in hydropower provides for near-term revenue generation through management of existing facilities, minimizes risk by utilizing proven technologies and investing in reliable assets, and creates long-term growth potential through efficient licensing and development of hydrokinetics and qualified hydro projects.

Future Financial Plans

FFP is currently raising $5 million through sale of equity and grant funding to fund its operations through the end of 2010. We project a total raise of $25 million will fund operations through licensing in 2012, after which we will finance projects through tax-investor "flip" structures. We are in discussions with private equity firms regarding acquisition of up to $1 billion in revenue-generating hydro assets that will generate excellent returns in the near term and which may reduce the amount of FFP equity to be sold.

Future Solar Systems

Presented by:
Jim Dunn, CEO

Company Overview

Future Solar Systems is a private Massachusetts company focused on the design, sales, installation and strategic ownership of commercial, public, and private Solar Photovoltaic, (PV) projects in the 100-1500KW range. Future Solar is creating and implementing unique PV System design and installation methods, along with simple financing approaches that will allow customers the benefits and ultimate ownership of solar renewable energy systems with low electricity costs and NO initial capital cost, using simplified power purchase agreements, (PPA's), and 'Shared savings plans'. Future Solar has a proven management team and vital relationships with key suppliers and experienced installers, serving the northeast US region.

Future Solar provides rapidly installed roof and ground mount PV systems to a range of key markets, and will sell specialty components and mounting systems to other installers at competitive prices. Future Solar is positioned to competitively address a host of under-served markets by employing their unique business approach, combining optimum buying power and utilizing a network of proven industry contractors, with unique pre-engineered assemblies, and the ability to efficiently develop customer relationships and project commitments, and arrange project financing. FSS offers investors an extremely attractive ROI, with an easy to ramp business in a relatively untapped growth market.

Officers and Directors

Jim Dunn, CEO
Richard Chase, Director of Sales & Marketing
Mike Strizki, Director of Installations
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Technology/ Products

Future Solar is developing several novel ways to dramatically reduce the cost of large solar systems with pre-engineered arrays of PV modules, for rapid integration on rooftops, carports, and ground mounts, reducing labor costs by over 50%, and optimizing the installation of large, 100-1500KW systems. Future Solar is also developing a proprietary new Totally Integrated 3-5KW Solar System which can be rapidly installed as both a standalone system, like for carports, or as a 'Mega-Module' in large 'All-AC' systems. This systems approach will optimize the maximum power produced by each individual panel, providing the maximum overall power without using micro-inverters on each panel. Over time, Future Solar will sell these items to other installers and integrators, enhancing their total revenue and providing larger economies of scale.

Markets and Applications

The worldwide solar electric industry has seen exponential growth over the last ten years, fueled largely by attractive incentive programs in Europe and Japan. During 2005-2008, a shortage of Silicon and bottlenecks in the solar value chain limited production and availability of PV modules while demand throughout Europe and the US saw rapid increase, benefitting sellers of both poly-silicon and other solar modules. However, with the world financial downturn at the end of 2008, a major transition began in the rapidly growing PV in-

dustry, due to a major oversupply of PV panels and insufficient financing to complete a host of large projects in Spain and Italy. These key market dynamics have quickly transitioned the Solar PV manufacturing industry to a 'buyers market' from being a 'sellers' market'. In fact, the market has not proven elastic enough to absorb the huge oversupply, creating a major buying opportunity for both the project installer and third party investor. Based upon projections of leading analysts, the cost of PV panels could drop so low next year, that the key system cost driver will become the installed labor cost, which up until this time has only represented 15-20% of the total PV systems cost. This reduced pricing of key components, combined with the new US Investment Tax Credit program and numerous state incentives and rebates, offer a very strategic opportunity for companies like Future Solar to capitalize on this lucrative market opportunity. This market scenario provides our investors an unusually strong and secure opportunity, with high margins and solid ongoing profits, and minimal risk.

Commercial Opportunity

Future Solar's business model includes Sale of components, Installation of total systems, and Ownership of all or a portion of LLC's under Power Purchase Agreements. Future Solar creates a new LLC for each project, that owns the system and sells electricity produced under a PPA or 'Shared savings plan', with a predictable future revenue stream. These LLC's offer Future Solar's investors the immediate benefit of the Federal ITC and Accelerated Depreciation, and long-term stable returns from the sale of Renewable Energy Certificates, (REC's), and green electricity. Future Solar utilizes both federal and state grants/tax credits and REC's for leveraged ownership in PV system assets, significantly enhancing the return profile for Future Solar, their customers, and investors. Further revenue benefits and increased profits will be afforded by Future Solar's proprietary new pre-engineered arrays, which eliminate over 75% of the expensive rooftop labor costs, reducing typical Total Project installation labor costs by over 50%, using lower cost off-site labor in automated pre-assembly facilities, (with small increase in delivery/onsite equipment cost).

Competitive Advantage

Future Solar's business strategy offers a number of key advantages, including efficient marketing, selling, site assessment, design, and contract efforts. Future Solar purchases all major components at low contract prices through strategic supply relationships. Future Solar is technology agnostic, but outsources the installation and system maintenance to certified installers and electrical contractors. Future Solar is able to efficiently run their business with a minimal staff, while leveraging solid buying power, and special contractor outsourcing, and the use of our proprietary products and pre-engineered assemblies.

Future Financial Plans

Future Solar is seeking $2.5M in Series A equity capital, to launch and execute over $10M in pending PV projects, growing to over $35M in project execution in 2010, and over $75M in project revenue in 2011. Future Solar also offers investors a series of LLC project opportunities, for investment and ownership of individual PV systems, on a case by case basis. These offer lucrative returns for the first 3 years, with attractive ongoing ROIs for another 8 years. Future Solar has the plans, resources, technology, and partnerships to take advantage of the recent drop in PV panel prices, with a novel way to dramatically reduce the overall total cost of PV system installations, making us extremely competitive and more profitable, as the US PV industry experiences rapid expansion over the next 5-10 years.

Green Running

Presented by:

Peter Davies, Managing Director

Company Overview

The company's goal is to be the leading provider of energy management and analysis software for real-time data acquisition. Market is SME's datacenters, universities, Government buildings and hospitality sector with a market size of over 500,000 potential customers in the UK alone. We have been working for the last two years on producing effective software tools for analysis and presentation for advanced energy management. The team consists of the UKs highest certified LabVIEW system integrators, support of SETsquared and industrial partners in trialing the system. The Goal is to raise 100K to support sales, further R&D and marketing.

Officers and Directors

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www.GreenRunning.com

Product/Technology

Real Time energy monitoring with individual device analysis allowing individual device detection and real time exception reporting with bench marking against a "perfect day".

Markets and Applications

SME, University, datacenter, government buildings. Application is based around power monitoring.

Commercial Opportunity

Links with University of Bath, data centers in UK and large industrial building have completed case studies for a sales proposition and feedback or system in those areas.

Competitive Advantage

Customised Real-Time analysis and with a user tailored managment interface which can be viewed from anywhere in the world. Ability to individually determine which devices are on at each time and calculate from the data how much power an individual device has used during the course of the day from its real time power characteristics and the software's poweful signal analysis tools. The user has the ability to see real time usage on their mobile phone and receive exceptions alerts via text and email for quick response time. With the use of internet data streaming the user can see changes the second an appliance is turned on from anywhere in thew world and have access to the historic data for advanced report generation using the sophisiticated software created . The system allows for futher integration for the addition of Gas and Water metering and any extra features like temperature and humidity monitoring, with a spare 30 channels for other RT acquisition also available for streaming up to our online database.

Future Financial Plans

Mass production of the system and marketing strategy. Looking for a 100K investment.

Grid Solutions

Presented by:

Mitchell Wondolowski, Business Development

GRID SOLUTIONS

Officers and Directors

Mitchell Wondolowski,
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Company Overview

Greentech Media Research expects demand response (DR) to be the first application of the smart grid to capture a critical mass of the market penetration. The demand response market is now being referred to as a gold mine (New York Times) and industry analysts have called for this market to quadruple over the next five years.

Grid Solutions has developed a low cost residential demand response solution for a small utility, Vineyard Power, on the island of Martha's Vineyard, MA. Vineyard Power, a community-owned renewable energy utility, will be producing large scale renewable energy from off-shore wind turbines. They plan to promote PHEV's as the transportation vehicle of choice to allow the co-op storage capacity when the turbines are generating electricity at night. They are implementing a network that will support their requirement to balance the electrical load during the course of the day. Unlike many proposed Home Area Networks (HAN) for residential demand response that engage the consumer in reducing their use of electricity, Grid Solutions developed a system that integrates key source information (spot price of electricity, the amount of electricity being generated by their wind turbines, aggregate load for its members) to a rules engine to generate automated commands to shed load or to store energy. At a conservative 5% savings, residential DR equates to $1 biillion in savings per year, a present value of nearly $12 billion over the next two decades, in the US alone.

EnerNOC and Comverge have been the only players to date concentrating on commercial/industrial demand response. With GE and Whirlpool's release of smart appliances beginning November 2009, the infrastructure will be available to implement residential DR.

Product/Technology

Residential Demand Response – This is a platform based Demand-Response (DR) solution with a highly scalable functionality. Supports unlimited number of information sources to dynamically manage performance as well as create settlement transactions. The system allows n number of rules and conditions as transaction parameters. Open APIs for extensibility, interfacing and integration

CurrentViews - Online information portal for ratepayers to access real-time information about their energy consumption and for utility administrators to access realtime aggregate usage and renewable generation from sun and wind. A simple user interface allows users to 'drill down' to more detail.

Both applications are wrapped in a data security layer to allow management and control of data between the consumer premises and the utility office. This allows the utility to set up a communication system that utilizes the public commercial networks like cable or wireless or WiMax networks etc. to send and receive data securely eliminating the need for a private dedicated network.

Markets and Applications

Demand Response during periods of peak energy demand is a clean, cheap and fast method to match supply. Simply put, it is the practice of shutting off or turning down non-essential devices in the home, campus or business during times of peak demand. Demand Response is a critical piece of the US effort to reduce energy consumption.

While the smart home has been an exciting proposition (for early adopters/futurists) for decades, what is different now is that for the first time an infrastructure is being deployed to support communications between the end-user and the utility. This is an important change..

The Smart Grid market has been projected to be substantial:

- $1.3 billion in VC funds have been invested between 2005 -2009
- US government has budgeted $3.4 billion in smart grid investment to be released later this year.
- EPRI (Electric Power Research Institute) estimates a $165 billion investment in US over next two decades ($8 billion/year)
- Demand response market will quadruple over the next five years

Commercial Opportunity

Electric utilities – domestic and foreign

Partnerships with smart grid solution providers

Competitive Advantage

Grid Solutions has developed a residential demand response solution intended for the utility. Other solutions assume the acceptance and participation of each customer.

We are the pioneering vendor in offering a hybrid solution intended for the electric utility. First implementation will be Q1 2010 for Vineyard Power.

Future Financial Plans

Seeking $500k line of credit to get the company to first round of funding – Debt will have an option to exchange for stock at first round of funding.

GroundedPower, Inc

Presented by:
Carl Gustin, President

GroundedPower©
Smart Energy Monitoring and Management

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Company Overview

GroundedPower's mission is to help energy consumers and companies gain greater control over their energy usage and reduce their environmental impacts. Its technology involves real-time energy management and a Customer Engagement System. The CES motivates and empowers consumers to achieve deeper, more persistent energy savings through goal setting, task selection, incentives or rewards, and social networking using a unique application of well-established principles of behavior.

It fits within a multi-billion dollar market that is growing at double-digit rates.

The team brings together people with real-world experience in the utility industry, in applications software development and in using principles of change to bridge the gap between technology and human behavior.

GroundedPower sets itself apart from products such as in-house displays, monthly mailings, home automation and other products by its real-time monitoring and web portal that keep customers engaged in energy efficiency through goal setting, a task selection process, real-time and relevant feedback, a rewards system and social networking among participants.

The company's funding goal is to complete a $1 million seed round in 2009 and a $2 million to $5 million institutional round in early 2010. Funds will be used for full-scale rollout.

Product/Technology

GroundedPower's Energy Management and Customer Engagement System links real-time energy usage information through a wireless network (ZigBee) with well-established principles of engagement, motivation and behavior change from the fields of psychology, health and applications software to help consumers achieve deeper, more sustainable energy savings. GroundedPower integrates education, social networking and energy consumption feedback in its web portal through an innovative social learning process. Smart energy technology and consumption and rate data alone will not reduce energy consumption and demand. Consumers adopt new technology based on relevance, ease of use and benefits. GP's expertise is directed at bridging the gap between technology and the consumers it is designed to help. Real-time information is obtained from either a GP-built wireless monitor or from AMR or AMI meters.

Markets and Applications

GroundedPower's primary markets are reached through utility company efficiency and demand response programs for residential, small commercial and municipal customers. These markets had been growing at an average rate of 20 percent per year in recent years with total spending in 2008 approaching $4 billion. Stimulus grants for smart grid/smart meter initiatives, block grants to states and weatherization programs are accelerating program spending, as are carbon credit auctions in the Northeast and the development of Forward Capacity Markets.

Commercial Opportunity

GroundedPower's primary target customers are utilities, both investor and publicly owned, large and small, that are required to conduct energy efficiency and demand response programs funded through either approved System Benefit Charges or through rates. The utility incorporates GroundedPower's technology into efficiency program offerings to its end-use customers. Marketing is through direct contact with utility executives and program managers with parallel outreach to regulators and policy makers charged with and interested in energy efficiency program effectiveness.

Competitive Advantage

Technologies seen as competing include in-house displays and plug monitors, monthly presentment of billing information either by mail or web, and home automation. Pilot programs have generally demonstrated a lack of persistent savings and levels of savings well below anticipated potential. GroundedPower's technology motivates, engages and empowers consumers through a web portal that incorporates and integrates principles of behavior unlike any other product of which GP is aware. The GP technology also incorporates a measurement and verification function, which provides utilities and regulators with real-time data on energy savings and how those savings are achieved.

Future Financial Plans

GroundedPower is currently raising a $1 million seed round with funds dedicated primarily to product development. The company anticipates an institutional round of $2 million to $5 million in early 2010 for full-scale rollout. Approximately 80% of funds will be allocated to product development and refinement and 20% to business development.

Heavy Lift Systems

Presented by:

Daniel Nachbar, President

Officers and Directors

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Company Overview

Large-scale wind turbine construction and maintenance are experiencing rapid expansion, conservatively estimated at 400% in the next 10 years. However, high cost and logistical constraints of ground-based mobile cranes have created a critical choke-point on this emerging market. Heavy Lift Systems addresses this need with an entirely new type of crane that harnesses the buoyant lifting power of hot air. Our system combines age-old technology with patent-pending innovations to give the wind power industry the lifting power it needs with more rapid deployment, a far smaller infrastructure footprint, and a cost savings factor of 2-4 over current service providers. We have completed our prototype R&D and are now seeking private equity investment to fund our product development and market entry.

Product/Technology

Heavy Lift Systems has developed the Tethered Aerostat Crane (TAC). Applying research results in areas of aerodynamics, materials, and control technologies, the TAC uses the lifting power of heated air to lift heavy loads to great heights in remote locations. The TAC incorporates several patent-pending innovations that provide it with unmatched operational control and ease of deployment. By using a TAC rather than a conventional ground-based crane, wind power companies can build and maintain wind turbines at lower cost, without specialized access roads, and in otherwise inaccessible locations.

Markets and Applications

The U.S. Department of Energy is pursuing a plan to provide 20% of the country's electricity needs via wind power by 2030. This will require constructing between 60,000 and 100,000 new large-scale turbines. The market for cranes to support new turbine construction is currently $250 million per year and will grow to $1.1 billion per year within 10 years. In addition to the new construction market, the growing installed base of large turbines is creating an expanding market for cranes to support turbine operation and maintenance (O&M). At present, the heavy lift O&M market is $80 million per year and is estimated conservatively to grow to $400 million per year within 10 years. The figures above represent just the U.S. demand. Overseas opportunities are even larger.

Commercial Opportunity

For the O&M market, our target customers include turbine manufactures to support maintenance of turbines under warranty. For turbines out of warranty, our customers will be turbine maintenance companies and the owners of large wind farms. For the new construction market, our target customers include general contractors and crane owners and operators.

Competitive Advantage

Conventional cranes require 15 to 20 tractor-trailer rigs to haul their components between job sites, as well as days of work by large crews to assemble and disassemble these components. The TAC can be deployed much more readily for lifts to essentially unlimited heights at difficult-to-reach locations. As a result, overall operating costs are significantly lower (factor 2-4) than those for conventional cranes,

Double-width roads are required for conventional cranes to move around large job sites. These specialized roads limit turbine location options, increase negative environmental impacts, and can add millions of dollars to overall project cost. In contrast, the TAC can be transported in a single shipping container and requires minimal on-site configuration. The TAC's lower capital cost makes pre-deployment at large wind farms a practical option.

Future Financial Plans

We have completed our prototype R&D and filed for four key patents. We now seek private equity to complete TAC product development and entry into the turbine O&M market within 18 months of funding. Milestones for our next phase will include:

- Product Development
  - Design, engineering, and first article manufacturing
  - Field trials and design refinement
  - Initial operational deployments
- Business Development
  - Identification of strategic partners for field trials, sales, and licensing
  - Development of cost models and service metrics
  - Final development of next-phase and longer-term business plans (i.e., the new construction market)
  - Initial sales and product delivery
  - Capitalization of the company for growth

HeliaThermal

Presented by:
Eric S. Graber-Lopez, CEO

Company Overview

HeliaThermal is developing a new, low cost, technology that can provide zero carbon emission refrigeration and air conditioning to a variety of end-markets. The Solar-Polar Module (SPM) can be used to refrigerate vaccines, food supplies, and many other off-grid applications. The SPM can also be easily integrated into existing centralized cooling and refrigeration applications paving the way for entry into the residential and commercial markets. The SolarPolar Module requires little maintenance over its service lifetime, and will operate uninterrupted for years at a time, without consuming electricity or generating greenhouse gas emissions. Over forty percent of institutional and commercial electricity consumption is used to provide for lighting and cooling/refrigeration needs. The SolarPolar Module will use the sun's heat to produce cooling and refrigeration with an efficiency factor superior to that of photovoltaic electricity conversion factors at a lower lifetime energy cost.

Officers and Directors

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Product/ Technology

The SolarPolar Module is an absorption refrigeration system. The system converts thermal energy to cooling directly in the range of temperatures achievable by available solar collectors. The SPM is low cost, uses widely available materials, and is easily manufactured. The SPM has no moving parts and uses no electricity. It is very reliable and will work without maintenance for many decades while using a widely available refrigerant as its heat transfer medium. The SPM provides very low cost per watt cooling with no carbon emissions, is ideally suited for off-grid cooling and refrigeration needs and can also be integrated into existing forced-air cooling systems.

Markets and Applications

A quarter of the world's population has no access to refrigeration for food or medication (e.g. India loses over 50% of its food crops before they reach their destination). There are also over 65 million installed central cooling residential systems and millions of non-mall commercial cooling and refrigeration units in the US alone, using over 444 billion kWhs of electricity a year, accounting for over $40 billion in expenditures each year, representing 12% of annual electricity use in the US. Solar-Polar can address the needs of these markets at an attractive price, reducing electricity expenditures for cooling/refrigeration.

Commercial Opportunity

We intend to introduce the SolarPolar Module for use in off-grid applications, as well as pursue the commercial and insitutional air-conditioning market by developing partnerships with existing renewable energy installers and distributors. We have established initial relationships with distribution partners for commercial rollout once the SolarPolar Module is ready for deployment. The company will also work with regional utilities and ESCO's during the SPM pilot program.

Competitive Advantage

The SolarPolar Module has two primary competitive advantages: 1) it is designed as a modular system and as such can be easily matched to customer needs; and 2) our product design uses widely available components for manufacture, thus ensuring low cost per watt of installed capacity. The SolarPolar Module uses no fuel, has negligible maintenance needs, and will be sold at attractive prices. Cost of ownership will be lower than that of conventional cooling/refrigeration units. The SPM will be made with widely available materials and will not need specialized manufacturing equipment.

Future Financial Plans

The SolarPolar Module is in the working prototype stage. A functional prototype has been built and tested. A commercial quality module has been designed and suppliers have been identified. We are now working to secure funding for the manufacture of several commercial quality units for long term testing. The company is seeking $1,000,000 for continued product development and commercial scale test deployment of the SPM.

Highest Wind LLC

Presented by:
Dimitri Cherny, CEO and Founder

Highest Wind

Officers and Directors

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Company Overview

Highest Wind Energy Gliders™ harvest the winds a thousand feet above the ground – blowing two to three times faster than near the ground. These stronger and steadier winds make Energy Gliders™ cost-effective in the low-wind locations where wind turbines are not – more than half our planet. Wind resource maps reveal that less than 15% of our planet has average near-ground wind speeds adequate for producing electrical power cost-effectively. Wind turbines are limited to harvesting near-ground winds by the height of their towers – a few hundred feet at most – making them cost-effective on only a small fraction of our planet. Energy Gliders™ are cost-effective for at least three times more locations on earth.

Highest Wind Energy Gliders™ produce more than $13,000 worth of electricity annually (130,000+ kWh at $0.10/kWh). Designed for the largest 200,000 farms in the 45 US states with winds too low for wind turbines, Energy Gliders™ provide a payback in less than seven years with average 30 foot winds of just 8mph. Renewable energy incentive programs in our target states reduce that payback to less than three years. For farms throughout the US, the USDA's REAP program reduces payback by at least two more years making Energy Glider purchases possible in some states with no cash out-of-pocket – and $13,000+/year of 'free' electricity every year thereafter.

Product/Technology Profile

Similar to a child's kite, patent pending Energy Gliders™ fly - rising and descending - a thousand feet above the ground (but below FAA controlled airspace) pulling a high-strength tether to spin a generator on the ground. Energy Glider systems run continuously and automatically to provide a capacity factor of greater than 50% at a levelized cost of energy of less than five cents per kWh – nearly as low as the largest utility-scale wind turbines and many times lower than the best and lowest cost solar PV systems. Our first 30kW production unit will produce more than 130,000 kWh at sites with avg. 30ft. winds of just 8mph for a lifetime of 30 years, providing more than half the electricity needs of the average US farm. With an operational requirement of more than 160 acres of land, NIMBY is a minimal concern.

Markets and Applications

Our Initial market is the 200,000 largest farms in the 45 US states with winds too low to make wind turbines cost effective - a $14B market. Early marketing and dealer efforts are focused on the top seven states with the best combination of high electricity prices, suitable winds, and the best renewable energy incentive programs. Initial marketing efforts are specifically targeting the largest dairy farms in those states. While they comprise only a $290M market, with the current unsustainable market price for milk, they are eager for any product that can reduce their costs and/or provide an additional revenue source. Our market research has yet to find a dairy farm unwilling to purchase an Energy Glider.

Commercial Opportunity

Energy Gliders™ will be sold through existing networks of regional dealers currently selling agricultural or energy generation equipment, all with established relationships among our most likely prospects – farms. From a 'self-marketing' perspective, Energy Gliders™ are nearly perfect – visible from miles around, we anticipate considerable word-of-mouth marketing spreading virally from each successful installation. Our marketing efforts will be primarily 'product-marketing', helping our dealers identify and sell to our most likely prospects in a variety of farming verticals. Broad marketing will be mostly PR-based – riding the 'Green' wave.

Competitive Advantage

Highest Wind has discovered a "blue-ocean" market – wind power for low-wind locations – that is currently unfulfilled by any other products. Wind turbines provide payback periods of longer than a decade in these low-wind areas. Solar PV have even longer paybacks. Anaerobic digesters have an entry price fifteen times higher. For any type of farm seeking distributed renewable energy, nothing else works in as many locations so cost-effectively. Four other companies are publicly developing related Airborne Wind Energy (AWE) technology but all are targeting utility scale applications – 1Mw or greater. No other AWE developers are designing distributed renewable energy generation systems to serve the agricultural market.

Future Financial Plans

Our past year of research has been supported primarily by more than $100k of investment from friends. Our next two years of development and certification testing will be supported by the $5M in series-A investment we now seek. That money will allow us to build the channel, marketing and service organization we require before shipping the first production Energy Glider units by Q3-2011. Highest Wind LLC will remain a design, marketing, sales and service organization – our management team's strengths. We are outsourcing engineering and eventually manufacturing to our highly qualified partner organizations - Goss International and EOS Research.

Hy-SyEnce

Presented by:
David J. Roache, COO

Company Overview

Hy-SyEnce is an early stage Massachusetts-based technology company in the process of proving a unique, scaleable and proprietary Microbial Fuel Cell (MFC) system that will dramatically reduce the high cost of industrial wastewater treatment, and generate clean energy.

If proven scalable, our technology will be a game-changer:

- lower costs by more than 50% compared to traditional wastewater treatment
- generate electricity or hydrogen
- significantly inhibit methane, a greenhouse gas more damaging than CO2.
- eliminate fines and surcharges relative to BOD/COD levels
- create 30+ jobs for Massachusetts

Officers and Directors

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David J. Roache, COO

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Our initial focus is on the $3B food and beverage processing market. We are currently working with an industry leading company to scale and commercialize our system. Our route to market is both direct and through strategic channels including water technology companies, energy consulting and engineering firms.

Hy-SyEnce seeks to close $1.5M round (including customer funding) in Q4 to prove next stage, and anticipates an A Round of $6-8M in Q3 2010 to scale and go to market in 2011.

Product/Technology Profile

Microbial Fuel Cells (MFC's) are a promising next generation technology that leverage a natural process where bacterium consume nutrients resident in wastewater to reduce pollution levels (Biological Oxygen Demand/Chemical Oxygen Demand), generate clean energy in the form of electricity or hydrogen, and inhibit methane, a greenhouse gas more damaging than CO2.

Markets and Applications

Target wastewater treatment markets include food and beverage processors, agricultural products, wood paper and pulp manufacturers, and municipal water systems which comprise a market > than $15B.

Commercial Opportunity

Initially, we will focus on the $3B food and beverage processing market. Capturing 5% of this market alone creates a company with $150M+ in revenue.

Competitive Advantage

Hy-Syence is focused on solving an immediate customer/target market issue; the reduction of organic content in wastewater. Our target market views the generation of clean energy as an added bonus. The majority of our competitors are focused primarily on the generation of clean energy.

The company is consistently reducing organic content levels by 85-92% in the lab, which is consistent with industry needs. To our knowledge, our competitors have not yet achieved these levels. On the basis of these certified results, we have a customer willing to help fund a demonstration module on their manufacturing site as the next step in the scaling process.

Hy-SyEnce has applied for patent protection on its core system technology and configuration which squarely addresses the key impediment to scaling.

Hy-SyEnce seeks first mover advantage over its direct competitors Emefcy (Israel), Trophos (Somerville, MA), and IntAct Labs (Cambridge, MA), all early stage companies that have received some funding and are attempting to scale their respective technologies for various markets.

Future Financial Plans

Hy-SyEnce seeks to close $1.5M round (including customer funding) in Q4 2009 to prove next stage by Q3 2010. This includes the build and test of a demo and system array on our customer's site. Hy-SyEnce anticipates an A Round of $6-8M in Q3 2010 to complete scaling, and to go to market in 2011.

KGRA Energy, LLC

Presented by:
Jason Gold, CEO

Company Overview

KGRA develops modular, scalable geothermal power plants. The Company is unique from traditional geothermal developers because it avoids the costs and risks associated with exploration and well drilling by using existing wells and infrastructure of the oil and gas industry.

KGRA's facilities harness the thermal energy from the fluids found in known hydrocarbon wells to generate and sell clean, renewable electricity at a lower price than the local utility. The Company's business model is to build, own and operate these power plants and sell electricity to oil and gas operators under long-term fixed-price contracts which lower their energy costs while maintaining its own operating margins around 80%.

The market for producing geothermal electricity from oil and gas wells has been estimated to be between 5-10 thousand megawatts in the US alone and a multiple of that figure internationally.

Headed by a team of energy professionals, KGRA has a significant first mover advantage. Moreover, the Company's patent portfolio covers the application of some existing, field-proven equipment for use in generating electricity from these hot oilfield waters.

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KGRA is seeking roughly $4 million in development capital and a range of funding amounts for project debt and equity.

Product/Technology Profile

KGRA develops highly repeatable, scalable, modular geothermal power plants that can be adapted to the specifics of a hydrocarbon project site.

The Company's value proposition includes:

- Extending the life of a hydrocarbon resource by lowering the energy costs of a well operator. KGRA supplies clean, renewable energy that is cheaper than utility-sourced, fossil-fuel based electricity improving the economics of a producing hydrocarbon site
- Providing a renewable source of baseload power to these operators. Unlike wind and solar energy, geothermal energy can provide a constant supply of electricity at a predictable price
- Offering a zero-emissions energy solution that allows well operators to reduce their carbon footprint

Markets and Applications

Using 285ºF as a nominal temperature, the National Renewable Energy Laboratory estimates a potential of 7,585 MW of geothermal power to be harvested from existing domestic oil and gas sites within Alabama, Arkansas, California, Florida, Louisiana, Mississippi, Oklahoma, and Texas. Based on the little activity which has transpired thus far within this niche, the market for extracting geothermal energy from hydrocarbon resources has barely been scratched.

Commercial Opportunity

Oil and gas operators, wich are KGRA's target customers, have been very receptive to the Company's energy solution because of its ability to extend the life of hydrocarbon sites. Electricity costs have historically been one of the largest operating expenses in the production of oil and gas. Moreover, this cost tends to increase as wells age. As hydrocarbons are extracted, pressure within a well decreases, creating the need for methods to enhance recovery. While they improve productivity, these methods consume an ever-increasing amount of electricity until energy demands become so significant that production is no longer economical and the well needs to be shut down. Power costs often represent 21% of total production expenses. By replacing expensive, utility-sourced, fossil-fuel generated electricity with cheaper, renewable, geothermal energy, KGRA's energy solution makes hydrocarbon recovery more economical and thereby increases the life of these wells.

KGRA obtains customers by:

- Obtaining electronic data used to screen for hydrocarbon wells where conditions exist for economical energy production
- Forming partnerships with organizations within the oil and gas industry for co-selling and site-identification purposes
- Aggressively hiring business development staff with contacts in the oil and gas industry.

Competitive Advantage

Aspects of KGRA's business plan that lead to its defensibility include:

- KGRA has a first-mover advantage
- Exclusive distribution territories for the equipment (negotiated with equipment supplier)
- A "method of use" patent application on file with the US Patent Office
- Ability to monetize tax credits to reduce the net cost of equipment
- Repetitive, modular power plant design that allows for rapid and scalable deployment
- Scale/volume purchase
- Full turn-key solution

Future Financial Plans

KGRA seeks $7 million of which $4 million will be used for working capital and general corporate purposes and $3 million will be used in the development of its first project. The amount of project funding that the Company seeks, however, is flexible; KGRA has the project pipeline to deploy up to $100 million.

Lifecycle Renewables, Inc.

Presented by:
Rory Gaunt, CEO

Officers and Directors

Rory Gaunt, CEO
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Company Overview

Simple truth: People consume energy, food and produce waste simultaneously and in close proximity. This means that population centers are creating vast quantities of organic waste that can be used for their benefit as renewable energy. Lifecycle Renewables Inc. (LR) produces electricity and heat for commercial buildings with large scale diesel generators that run on 100% waste vegetable oil (WVO). LR is focused on acquiring WVO. We have found competitive advantage through extremely low cost processing of our vegetable oil fuel, raising WVO collection service levels beyond competitor's capabilities and providing the maximum compensation for WVO to our supply customers. Rory Gaunt, CEO brings strong business development and logistics acumen to this proven technology created by Adrian Venni. The first power installation is to be commercially operational at Whole Foods Market in Everett MA. LR has contracted with many supply customers such as Simon Properties, Boston Properties, Hyatt, Norwegian Cruise Lines, Chili's, Northeastern University, Mt. Auburn Hospital and many more.

Product/Technology Profile

LR refines WVO into a 100% vegetable oil fuel. LR installs and operates large scale combined heat and power systems that reside at customer locations and run on LR's proprietary fuel. This proprietary fuel is primarily comprised of the customer's waste vegetable oil.

Markets and Applications

LR plays in two markets. First, the WVO supply market is 474 million gallons in the US. Secondly, the energy market (electricity and No. 2 Diesel) is vast relative to the WVO supply market. Scarcity, for LR, is only found in the WVO supply market.

Commercial Opportunity

The target customer for LR is a large hospitality business that produces 1000 gallons or more of WVO per week and has significant electricity demand and is located in an area with high electricity costs. Examples of this target are in our current customer roster: Whole Foods Market, Simon Properties, Chili's… We market our collection and energy services through direct sales at 'C' level.

Competitive Advantage

Our sustainable competitive advantage:

- We produce energy with WVO for the volatile petroleum market but also the more stable electricity market. This means that we are able to choose our sales channel depending on market dynamics.
- Our proprietary fuel is produced through a low-cost mechanical process.
- We utilize a remote volume sensing technology that enables us to see capacity in the field real-time. Therefore we can operate at industry dominating efficiencies.

These advantages enable us to compensate supply customers at higher levels than the competition. We are considered the "greenest use" for this waste. High levels of compensation plus our green credentials means we win supply business.

Future Financial Plans

LR seeks to raise $750,000 in investor capital that comes with the depth of experience necessary to guide the company to a successful exit in year 5 of the strategic plan. Funding to date has been provided from Lifecycle Renewables Ltd., a UK company, and through revenues.

5 Year Strategic Plan Economics:

Phase 2 two - Expansion into new markets

	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
Revenue '000 $	$761	$2,903	$4,757	$10,833	$22,466
EBITDA '000 $	($216)	$993	$1,813	$3,706	$7,685

Use of Funds:

- Year 1 working capital for infrastructure growth $216k
- Year 1 capital expenditures to support WVO collection and processing of $219k
- Cash reserves held for future financing and Phase II expansion $315k

Funds raised will be applied to increase WVO supply through direct sales of large opportunities coupled with telesales and direct mail campaigns to target accounts. Funds will also be used to support supply growth by building out WVO collections infrastructure.

Optiwind Corporation

Presented by:
David Hurwitt, VP Marketing and Business Development

Officers and Directors

Russel Marvin, CEO
David Hurwitt, VP Marketing
Ted Chadwick, VP Manufacturing
Mike Zak, Director
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Company Overview

Optiwind has developed a new style of wind turbine, designed specifically for the mid-sized, distributed generation market. Current 3-bladed/monopole turbines are often too large, loud and expensive for the more populated areas where one typically find the schools, manufacturing plants and big box retailers that are looking for cost effective alternatives to the grid. Optiwind's 150kW and 300kW turbines are built around the principle of accelerating wind into a series of smaller, low cost fans that can economically produce power in areas with wind speeds as low as Class 2, dramatically increasing the size of the available US and international markets. At the price Optiwind is targeting, NREL estimates the market potential to be over 200k US sites, with the US representing 21% of the current global wind energy market. Optiwind is in the process of installing its first 150kW turbine in Connecticut and will use its next round of funding (Series B) for manufacturing and commercialization.

Product/Technology Profile

Optiwind has developed mid-sized distributed generation wind turbines that are customized for the commercial marketplace. At 150kW and 300kW, the turbines are built around a silo structure that causes the prevailing wind to accelerate into a series of smaller 5-bladed fans mounted on the side of the structure. This makes for a fundamentally quieter, more compact turbine that is installed and maintained without the expense of a large crane, making it possible to produce electricity at grid competitive prices in wind speeds as low as Class 2.

Markets and Applications

NREL estimates the US mid-sized wind turbine market potential to be up to 204,000 sites. The US represents 21% of the current global wind energy market. 53% of the US is in areas that can potentially produce wind power (defined as areas with Class 2 or better wind speed), and of this nearly half (43%) is in Class 2 wind. Conventional 3-bladed/monopole turbines typically require at least Class 3 wind to produce a reasonable ROI, thereby significantly reducing their mid-sized market potential. Optiwind's design now makes these Class 2 areas viable, representing a dramatic increase in the available market size.

Commercial Opportunity

While there is broad application potential for turbines of this size by customers spending $25k to $500k per year on electricity, Optiwind's initial target markets will be manufacturing, schools, and big box retail. Each provides the potential for appropriate electricity usage, available land and the ability to finance the turbine. The marketing mix for each of these target markets will include an integrated combination of online, print, direct and event communications. PR will be more broadly used to build brand and category awareness. Optiwind will launch initially in the northeastern US and then systematically expand into new regions, both domestically and internationally.

Competitive Advantage

The conventional 3-bladed/monopole turbine was designed for multi-unit wind farm installation and is currently not cost competitive with the grid when installed individually (at $4-$5/watt). With significant cost advantages achieved through reduced installation, blade and maintenance costs, Optiwind expects to launch at below current market pricing, with a clearly defined path to achieve $2/watt, making its single distributed turbine cost comparable with industrial wind farm turbines. There are several other companies actively pursuing wind acceleration based distributed technologies, however, Optiwind expects to be the first to commercialize this advance behind a strong patent portfolio.

Future Financial Plans

Optiwind expects to raise a Series B round of $15-$25 million in the first half of 2010. These funds will be used for manufacturing and commercialization, with a target launch date of early 2011.

Porous Power Technologies, LLC

Presented by:

Timothy L. Feaver, President and CEO

Company Overview

A New Lithium-Ion Battery Paradigm:

The patent-pending SYMMETRIX® production process from Porous Power Technologies (PPT) will revolutionize the production of lithium ion batteries by eliminating their most expensive component – electrode "separator" membranes now universally used – while improving their performance and safety. SYMMETRIX will enable cell manufacturers to hit aggressive industry-specified cost targets for Electric Drive Vehicle (EDV) batteries that are unreachable with competitors' expensive roll goods. PPT's simple in-house coating equipment will form highly porous separator films in-situ directly on electrodes, simplifying subsequent QC and assembly steps to improve yields and further reduce costs. The process requires little or no change to existing equipment and processes. PPT and our distribution partners will also continue to sell SYMMETRIX in rolls.

Officers and Directors

Timothy Feaver, President & CEO
Kirby Beard, COO & VP Technology
Bernard Perry, Senior VP, Business Development

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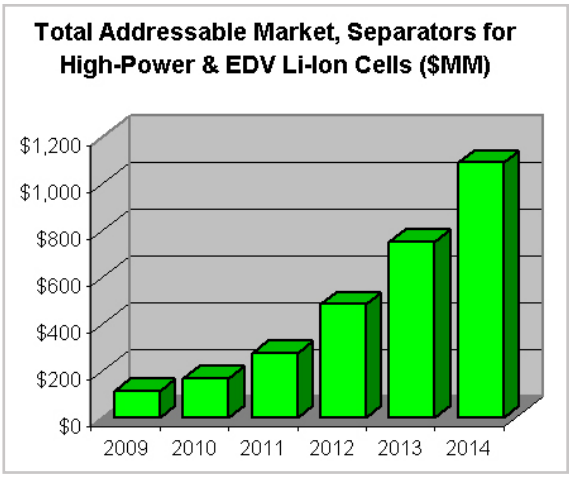
PPT's opportunity is timely. With over $40K in product revenues, PPT is working with most domestic lithium-ion cell manufacturers. They are now literally budgeting and spending billions of dollars on facilities and equipment to produce large lithium-ion batteries for emerging EDVs (electric, hybrid-electric and plug-in hybrids, four- and two-wheelers, aircraft and watercraft). Deutsche Bank predicts lithium-ion cell sales just for autos could reach $15B by 2010, and SYMMETRIX could save producers over $1B/year by 2014. PPT sales and license revenues are projected to exceed $40M in 2012.

Three of PPT's management team are founders or cofounders of multiple successful startups (including an IPO and strategic acquisition). PPT's managers and board have deep experience in lithium-ion battery and separator markets, including in top management at PPT's biggest U.S. competitor.

Product/Technology Profile

The benefits of highly porous SYMMETRIX separators have been proven in thousands of cells. Over twenty evaluation programs are active or pending. SYMMETRIX enables light-weight, large-format cells in foil pouches that last longer, charge faster, stack easier, run cooler, are safer and cost less. Lithium-ion cell manufacturers can double or triple high-power capacity, reduce capacity fade by up to 50% (like-new capacity for twice as many charges, critical for EDVs) and pump out 3-8X more energy at low temperatures. Efficient operation reduces heat buildup and has been shown to prevent fires caused by overcharging/shorting. 14 patent applications have been filed, and core patents are expected to be published soon.



Markets and Applications

Lithium-ion cell sales are projected to grow to $29B by 2014, with most growth coming from high-power and large-format cells. This emerging market segment is especially appealing since the need for improved production equipment from domestic suppliers not associated with Asian competitors is especially strong. The entire segment is addressable by PPT,

with separator sales projected to grow at a 58% annual rate to $1.1B by 2014. Most of the separator market for low-power cells is expected to be addressable by PPT as well.

Many additional future sales opportunities exist for PPT's versatile and unique membranes, including in other battery chemistries, ultracapacitors, fuel cells, filters, and low-cost waterproof fabrics more breathable than GoreTex©. In general, these markets will be addressed by licensees and corporate partners, allowing PPT to focus on energy storage applications.

Commercial Opportunity

SYMMETRIX® membranes, and especially in-plant SYMMETRIX coating systems, offer cell manufacturers an excellent value proposition, enabling them to achieve high performance and safety at higher profit margins, even at PPT's targeted 10-30% price premium. Longer cycle life will lower total ownership cost, critical for the large battery packs required for EDVs. Near-term target markets for PPT include aerospace and military, power tools and EDVs (especially bikes/scooters/motorcycles). PPT will enjoy at least three revenue streams: Sales of SYMMETRIX roll goods, sales of SYMMETRIX in-plant coating systems, and sales of specialty raw materials used in the production of SYMMETRIX films.

Customers include Bye Aerospace, EaglePicher Technologies, Johnson Controls, NASA and VARTA Microbattery. Many other evaluations are expected to lead to additional near-term revenues. PPT is now engaging equipment manufacturers and other potential strategic partners to help assemble, sell and support in-plant coating systems.

PPT's Pennsylvania R&D center is fully equipped for pilot production of films and lithium-ion cells, and a dedicated coating line at partner NEPTCO offers an annual capacity of 8 million m2 of SYMMETRIX roll goods for those customers not opting to purchase an in-plant coating system. PPT employees and reps will sell and support SYMMETRIX roll goods and coating systems worldwide, including into China through NEPTCO, where bulk rolls will be shipped for processing and delivery.

Competitive Advantage

Asahi Kasei, Exxon-Mobil, Celgard and Ube own 90% of the market and are rapidly expanding production of the lower-porosity, higher-resistance polyolefin separators that are the current standard for lithium-ion batteries. All of their products are produced using an extrusion/stretching process that limits their porosity (and thus their performance). They would not be practical or cost-effective to implement as an in-plant coating system. As a result, it is likely impossible that they can ever approach the low cost PPT's in-plant coating system offers cell manufacturers. The United States Advanced Battery Consortium, an EDV industry organization made up of the DOE and the Big Three automakers, has established a cost target of $1.00/m2 for separators, which are now priced at $2.00/$m^2$ or higher. Cell manufacturers using the SYMMETRIX in-plant coating system should be able to easily hit this target. For these reasons, competitors may also view PPT as a partner or acquisition candidate. Celgard parent Polypore has purchased two separator companies since 2008 and there have been several other recent acquisitions in the field.

Future Financial Plans

Capital History & Requirements: $3.5M in cash funding to date ($341K management/advisors, $1.9M other convertible debt, $1.3M SBIR). $2.2M is convertible into equity with the current $2M Series A (targeted close December, 2009). $3-4M Series B anticipated Q4-10.

Anticipated use of proceeds: Sales & Marketing $752K, Production ramp-up $547K, G&A $550K, R&D $273K, CapEx $18K.

Milestones: Close Series A, Q4-09; Strategic development agreement with equipment partner for in-plant coating, Q4-09; Launch full-volume roll goods production at NEPTCO, Q4-09; China distribution center established, initial Chinese volume sales, Q2-10; First in-plant coating systems installed at customers, Q3-10.

Practical Solar, Inc.

Presented by:
David Howell, Chief Operating Officer

Company Overview

Practical Solar's mission is to develop and introduce the world's first solar product – a concentrating solar (CS) system based on heliostats – to compete with fossil fuels in mainstream thermal energy applications. The system will be used for commercial building HVAC systems ("HVAC market") and low-mid temperature industrial processes ("Industrial market"), a combined $150 billion dollar market in the U.S. The targeted market segments exceed $30 billion dollars. Practical Solar's flagship product is the world's most elegant and versatile CS system: hand-installable heliostats (mechanized mirrors that reflect sunlight) individually controlled by a personal computer. These heliostats are currently being used for natural lighting, but Practical Solar will develop a scaled-up version (the HE600) and CS receiver enabling customers to realize a 2-6 year payback on their investment in thermal applications. The company Founder and CEO, Bruce Rohr, has several patents to his credit and has designed an astonishing array of cutting-edge technologies used in medical, optical, scientific and military industries. David Howell, COO, has managed several start-up companies to profitability. Practical Solar seeks $2,500,000 in equity funding to develop, test and certify the new system, and execute the first year marketing plan.

Officers and Directors

Bruce Rohr, Founder & CEO
David Howell,
Chief Operating Officer

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Product/ Technology Profile

Practical Solar's concentrating solar (CS) system will use heliostats (sun-tracking mirrors) and a CS receiver to produce up to 100kW of thermal energy at 100-500°F. The price (per m2 reflective surface area) of Practical Solar's current heliostat (the HE500) is one-tenth that of competitive offerings, but is not competitive with fossil fuels. It also does not include a CS receiver – necessary to integrate the system with thermal applications. Practical Solar will develop this receiver and a scaled-up heliostat (the HE600) to provide 6X more energy per dollar and compete directly with fossil fuels in mainstream thermal applications. It will ship in small boxes, be hand-installable and not require any set installation pattern. At $0.25/watt, it will be the most cost-effective and versatile solar system in the world. It will overcome the deficiencies of traditional solar products, which have low efficiency and limited output, and other CS systems that are impractical for distributed applications.

Market and Application

The addressable markets are (1) Commercial HVAC – building heating, cooling (using absorption chillers) and potable hot water heating, and (2) Low-mid temperature thermal industrial processes. The targeted market segments (U.S. regions with payback cycle of < 6 years) exceed $30 billion annually.

Commercial Opportunity

Initial marketing will be limited to the U.S. to minimize support issues. Commercial and Industrial establishments operating within 1–4 story flat-roofed buildings or located in suburban or remote regions generally have suitable land or rooftop area to deploy the HE600 system. A publicity campaign will accompany the product release, coordinated with advertising in building and industrial publications. Practical Solar will expand and certify its network of Distributor-Installers. The company's website, modified to address the target markets, will remain a fertile source of customer leads.

Competitive Advantage

Most CS systems are used for utility-scale power generation and are too unwieldy for distributed energy applications. Smaller trough systems have recently been installed for HVAC applications, but Practical Solar's HE600 will have 2X the efficiency and far lower installation & maintenance costs. Traditional solar thermal products such as flat plate collectors convert non-concentrated sunlight to thermal energy and have low efficiency (20% average), low output temperature (<140°F) and scant output in cold weather. Payback cycles are 12-20 years for hot water heating and they are essentially unusable for other applications. Practical Solar's CS system will average 70% efficiency, with output temperatures up to 500°F (virtually unaffected by ambient temperature), and a 2-6 year payback cycle in the target markets.

Future Financial Plans

Practical Solar seeks an equity investment of $2,500,000 to: (1) Develop a CS receiver and scaled-up heliostat; (2) Deploy a prototype system integrated with a commercial building HVAC system; (3) Execute first year promotional activities. Milestones include: (a) Completion of finite element analysis (FEA) modeling demonstrating HE600 wind-resistance to 110 MPH and achievement of efficiency goals; (b) Completion of cost analyses of bills of materials, meeting cost targets for mid–high volume; (c) Achieving 6 month and 12 month sales forecasts. Breakeven is expected in Year 2 after receipt of funding. Revenues are projected to exceed $62MM in Year 5.

Prism Solar Technologies

Presented by:
Stephen Filler, Director of Business Development

Company Overview

Prism Solar's mission is to develop solar as a real-life replacement of fossil fuels and in the process, grow the industry through partnerships and cooperation. Prism Solar's core technology is holographic optical film, which is a low-level concentrator that is incorporated in PV modules and can replace up to 72% of the cell material (typically silicon) needed in a module. Because the cell is the most expensive component in a module, the incorporation of holographic film dramatically lowers costs, and we expect to reach grid-parity ($1/W) in 2012. The holographic film concentrates light onto PV cells such that power production (kWhs) is increased 20-40%. Prism's target customers are PV module manufacturers for end-users in all markets (utility, commercial, and residential). Prism Solar's Board of Directors and management team is composed of seasoned PV veterans with decades of experience in the PV industry, particularly with successful start-up companies.

Product/ Technology Profile

Prism Solar's technology is holographic optical film that is incorporated into PV power modules. The film replaces up to 72% of the silicon required in a module, and because silicon is the most expensive material in a module, the incorporation of the holographic film dramatically lowers costs. The film also acts as a low-level concentrator that increases power production (kWh) by 20-40%, as verified by third-party testing. This increase in power production is due to a number of unique features of holographic film: it traps the most useful wavelengths of light (400-1100nm) and concentrates it onto the top and bottom of bi-facial PV cells; redirects infrared and UV wavelengths away from the module to reduce temperature 10 degrees C, thus maintaining peak cell efficiencies; accepts diffuse light during cloudy conditions; accepts indirect light from early morning and late evening sun and reflected light from albedo.

PRISM SOLAR TECHNOLOGIES

Officers and Directors

Rick Lewandowski, CEO & President, Board of Directors
Dr. Walter Robb, Board of Directors
Paul Maycock, Board of Directors
Richard Klein, Board of Directors
Tim Lewin, Board of Directors
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Markets and Applications

Worldwide PV installations reached 6 GW in 2008, representing growth of 110% over the previous year, and generating $37 billion in global revenues. The global economic crisis and the collapse of the Spanish market have slowed growth in the PV industry for the short-term, but long-term growth is expected to be very strong again in 2011.

Commercial Opportunity

Prism Solar's core technology is a transparent holographic optical film that acts as a low-level concentrator, supplying up to 3x concentration onto adjacent silicon PV cells, and resulting in increased kWh production of 20-40%. Holographic film is easily integrated into the manufacturing process of crystalline silicon PV modules. Prism's primary target customers will be PV module manufacturers and systems integrators. Prism is currently selling test modules to target customers so they can validate the improved performance due to the incorporation of the holographic film. Prism Solar will sell holographic film worldwide with licensing agreements and HPC modules for the US market.

Competitive Advantage

Prism Solar's primary competition are PV module manufacturers like First Solar, which have low production costs, and Sharp, which has gained a large market share. However, silicon module manufacturers, which represent 93% of the market, are expected to be our primary customers, not our competition. Prism Solar is also competing with silicon cell manufacturers. However, because holographic film costs much less than $.50/W to produce, Prism Solar has a strong competitive advantage regardless of what happens to the price of silicon.

Future Financial Plans

Prism Solar is currently in a Series B round of fundraising. The Company intends to continue to build out a 60MW manufacturing line for producing HPC modules, and to build 1 GW manufacturing line for holographic film.

QM Power (wait-listed)

Presented by:
P.J. Piper, President & CEO

Officers and Directors

PJ Piper, CEO
Joe Flynn, CTO
John Lebo, COO

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Company Profile

QM Power, Inc. is commercializing proprietary and patented advances in a unique magnetic circuit for the $70+ billion annual global electric motor, generator and actuator markets. QM Power is the result of the founders' combined experience of over 40 years in the motor, electronics and clean technology industries. QM Power's Parallel Path Magnetic Technology (PPMT™) or Parallel Magnetic Circuit (PMC™) is a completely new breakthrough technology that uses permanent magnets in a novel yet simple and efficient magnetic circuit design that can substantially reduce the upfront and ongoing costs and improve the performance of almost any electro-mechanical application. QM Power products have higher power density, which means they are much lighter, smaller and lower cost than other alternatives of comparable power output. In addition, they operate far more efficiently over a wider range of operating speeds than conventional/existing AC or DC electric motors, generators and actuators. Based out of Kansas City, MO and Boston, MA, QM Power has begun delivering prototypes to strategic industry leaders to demonstrate the improved efficiency and performance for linear a variety of high value short term and large long term opportunities/applications. QM Power was named a Venture of the Year Finalist at the NREL Industrial Growth Forum, a Top Innovator in Missouri in 2008 (SBTDC), nominated for an Innovation Award in New England in 2009 (SBANE) and one of the three Best Clean Energy Investment Presentations at the 2009 New Energy Symposium (NENY and E2TAC) in New York.

Product/ Technology Profile

Permanent magnets are used in electric motors, generators and actuators to replace field coils that produce static magnetic fields to provide a reduction in the size and weight of the machine while eliminating the I2R losses attributed to the field coils. However, replacing a machine's field coils with permanent magnets has historically had multiple trade-offs/limitations including limited controllability of the static magnetic field, limited gap flux densities and potential reliability issues. QM Power's Parallel Path Magnetic Technology obtains the benefits of using permanent magnets while minimizing the historical trade-offs/limitations found in conventional permanent magnet designs. The resulting electric motors, generators and actuators are smaller, lower weight, lower cost and have higher efficiency than competitive permanent magnet and non-permanent magnet designs.

Markets and Applications

QM Power is enabling higher performance and lower costs for electric vehicle, wind and hydro power generation, HVAC, industrial and robotic applications. These applications represent a significant portion of the $70+ billion annual global electric motor, generator and actuator markets.

Commercial Opportunity

QM Power anticipates ramping commercial product and licensing revenues to over $100 million within 5 years by working with the incumbent market share leaders in each of its large target markets to expedite the commercialization of PPMT. QM Power is currently cash flow positive with all of its development programs currently supported by Government research grants from the National Science Foundation, the Department of Energy and the Department of Defense.

Competitive Advantage

QM Power achieves higher average air gap flux density than competing permanent magnet designs by only utilizing attractive permanent magnet flux, a higher stator-rotor interface active area and flux division and squaring which result in a broader and higher range of torque and efficiency. The intrinsic higher power density results in lower weight, volume and upfront cost offerings, the higher efficiency results in lower ongoing operating energy/battery costs and the unique design provides lower maintenance costs and reliability and production advantages. The Company has several issued and pending global patents. The Company's entrepreneurial management team has a successful track record in several high growth technology companies including Aspen Aerogels, Ametek, Black and Decker and Johnson Electric.

Future Financial Plans

The Company has minimized its capital requirements by utilizing Government research grants to fund its research and development and by working with third party fabricators for its initial production requirements. The Company is currently raising a $2-5 million Series B financing to expand its team and facilities, complete field trials and provide additional working capital.

Resolute Marine Energy, Inc.

Presented by:
Olivier Ceberio, COO

Officers and Directors

Bill Staby, CEO
Olivier Ceberio, COO

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Company Overview

Our purpose is to finalize the development and qualification of a wave-powered seawater desalination system that, by 2014, will serve 0.7 million people in coastal communities in developing nations and reduce greenhouse emission by approximately 78,000 tons/year.

Our company, Resolute Marine Energy ("RME") is currently building wave energy converters ("WEC") that power the offshore aquaculture industry. For our desalination system, we are targeting "off-grid" coastal communities in developing nations where a solution to persistent water shortages is urgently needed and where our system will fill a huge gap between utility-scale and micro-scale fresh water production systems.

South Africa, our entry market, represents a $5.4B addressable market where our wave-powered desalination system will be readily adopted because it produces large quantities of clean fresh water at an attractive cost using very little human labor and no fossil fuels. It requires minimal capital investment, can be set up in a matter of a few days and can easily scale to meet growing needs. Our system will displace the diesel-driven desalination systems that currently dominate the market.

Our core expertise is in entrepreneurship, general management and ocean technology product development. We have accumulated over 20 years of professional experience and we have lived, worked and shared our lives with people in more than 8 different developing countries.

Product/ Technology Profile

Our system is comprised of an IP-protected Wave Energy Converter ("WEC") that pressurizes seawater piped ashore to drive a reverse osmosis desalination system we're jointly developing with Siemens Water Technologies. t utilizes "free" energy from ocean waves, can be installed in few days and is 100% clean. A 51-WEC plant can manufacture approximately 0.9 million m3/of fresh water/year (enough to supply 2,500 households) and, in the case of our first customer, provide a 3-year payback.

Markets and Applications

Our system fills a large gap in Market between macro-scale solutions (dams, pipelines, power plants) that require large capital investment and decades and micro-scale solutions that provide relief for relatively few people. Our addressable market is composed of rural/off-grid communities located in coastal area in developing countries suffering water scarcity.

During a visit in March 2009 in South Africa, our first entry market, we established with the Department of Water Affairs and Forestry ("DWAF") that the addressable market size is $5.4B for RME. This figure is conservative as DWAF suggested that installing systems in coastal communities where water supplies are currently sufficient and redistributing the surplus to inland off-grid communities would be of potential interest.

Commercial Opportunity

We devised a strategy to expand in South Africa (1) by identifying and securing our first customer, the municipality of Ugu, with whom we plan to run a commercial pilot by end 2010 (2) and by building our local network of engineers, consultants, development experts, entrepreneurs, and local investors. (3) We also leveraged the support of Ugu to gain greater access to the federal government, having already established strong ties with the DWAF that will allow us to create access to new markets. (4) Once our credibility is established in South Africa, we will apply the same marketing strategy in other developing countries such as Morocco, Peru or India.

Our target customers in South Africa consist mainly of municipalities located in Kwazulu-Natal (Durban), Western Cape (Cape Town) and the North West region (Port Nolloth) suffering a cumulative water supply deficit over 240 million m3/year in 2000.

Competitive Advantage

In our "middle scale" market, there is only one incumbent technology - diesel-powered systems – which can be easily displaced in coastal communities with adequate wave resources because of the following reasons:

Fuel cost: 70% of the cost of diesel-driven desalination system comes from energy cost. Our "free" energy makes our system quickly competitive in term of price

Collocation: our raw material and energy source are co-located therefore without supply risk

Maintenance: diesel generators require regular maintenance by skilled mechanics our system requires limited bi-annual maintenance

Environment: Combustion engines are only about 20% efficient and emit large quantities of CO2

Future Financial Plans

Our financing strategy is in two folds: (1) government funding to mitigate the technology risk and both a promising market and a first customer to mitigate the business risk. (2) Private investments and partnership are then sought for low risk milestones.

RME already secured 130,000$ for previous works from DOE and NOAA and has $300,000 of pending grants (November 2009) for the development of the WEC that will be used for our desalination system. Our first customer is the municipality of Ugu and South Africa is a $5.4B addressable market.

We anticipate raising approximately $400,000 from angels and competition prize for the adaptation of a desalination system that would be contracted to a TBD partner.

Silicon Basis Ltd.

Presented by:

Robert Beat, Founder and Technology Director

Company Overview

The cost of designing a new chip is escalating as Moore's Law advances. Programmability is the most effective way to counter this problem: one chip to address multiple markets. However, existing programmable hardware technologies such as FPGAs are too costly and power hungry. Soft Gate Array (SGA) from Silicon Basis solves this pain being 8 times denser, a quarter of the active power and a tenth of the standby power of a standard FPGA. Silicon Basis is a fabless semiconductor company; our first chip will incorporate an industry standard CPU, consumer interfaces and SGA in order to address a significant portion of the $50bn semiconductor market. Customers can use these chips to bring their products to market in a third of the time and at a quarter of the cost compared with standard hardwired chips. Our team has wide experience in the industry and a virtual team of experts are ready to join on funding. We are seeking £400K of seed funding to produce a proof-of-concept test chip in conjunction with a corporate partner. Further rounds of funding will build Silicon Basis into a significant player addressing a wide range of applications in the semiconductor industry.

Officers and Directors

Robert Beat, Founder & Technology Director
Paul Fellows, Commercial Director

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Product/ Technology Profile

Programmable logic is a semiconductor technology that allows a chip to be reconfigured to do many different applications. Verses existing competitive FPGA (field programmable gate array) technology, SGA offers:

- 8 times more logic per mm2 of silicon giving us a significant cost advantage
- 4 times lower operational power
- 10 times lower standby power
- Up to 2 times the performance
- Using industry standard manufacturing and design tool flows

Silicon Basis will produce chips that incorporate SGA with a CPU and industry standard interfaces so our customers can target a wide variety of consumer applications that are not currently addressed by FPGAs due to power consumption and cost.

Markets and Applications

By virtue of its flexible nature, SGA is applicable to a large portion of the $50BN logic semiconductor market. In our initial phase we will target a shortlist of applications that are the best fit to SGA and will provide the quickest path to revenue. Potential applications, market size and customer reaction are being investigated under the Carbon Trust incubator scheme and could include: internet/communications infrastructure, flexible video processing, high performance DSP and compute acceleration.

Commercial Opportunity

Consumer electronics is always demanding more: lower power, more performance but at a lower cost. Often, the only way to achieve these goals is to design a new chip, but this is getting expensive ($10M++). Soon, only the biggest markets will justify the risk. Our SGA based products will quarter the cost of a new chip and get it to market in a third of the time and will enable the chip-less business model. Our marketing will target organizations whose innovation is being stifled by the cost of designing a new chip: innovative system house as well as VC backed startups (we can also market to VCs who invest in such companies). We will position our products as being the cost effective alternative to hardwired designs and the low power alternative to FPGAs.

Competitive Advantage

There are a number of FPGA startups that claim to offer advantages in performance or power consumption, but none the claim significant advances in density, power consumption and performance. SGA takes programmable logic into new areas where our competitors will not be other FPGAs, but hardwired implementations such as ASICs or ASSPs. Verses ASIC we have an overwhelming cost and flexibility advantage and verses ASSPs we can add the advantage of a custom solution.

Other competition could come from large multiprocessor based startups, but these are inherently less flexible that programmable logic and we believe SGA could offer better power efficiency in high compute intensity applications.

Future Financial Plans

We aim to raise £400K in seed funding to build a small team to design a proof-of-concept test chip produced in cooperation with a corporate partner. A working test chip that can demonstrate a typical application will add significant value to the company even at this early stage.

A further round of £4.5M will be used to design and market our first product. Further rounds of funding will be required for follow-on products as we seek to address more applications and wider markets.

Solartrec, Inc.

Presented by:

Nalin Walpita, Chief Technology Officer

Company Overview

Solartrec is a Delaware corporation formed in 2005 to develop and commercially exploit a breakthrough thermodynamic cycle. This highly efficient conversion technology is simple, robust, low cost and scalable. It has a demonstrable edge over competitors whose products are less efficient and therefore more costly. Solartrec has put in place an aggressive national and international IP strategy, which includes a patent already granted and several in process.

The company has an alpha prototype engine in operation. A low cost proprietary software-controlled camless and crankless piston expander integrated with a standard rotating alternator, it is capable of handling fluids in the quality range totally wet to totally dry, and is providing operating parameters and performance figures. Solartrec is now poised to translate the proven efficiencies of the prototype into pilot projects, in a wide range of applications and plant sizes, using both solar thermal and waste heat recovery technologies.

Officers and Directors

Henri-Claude Bailly, President, CEO & Board Chairman
Jean Bailly, General Counsel & Secretary
Nalin Walpita, CTO & Director
John R. Armstrong, Director
R. Stanley Bowden, Director
Jack W. Eugster, Director

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Solartrec's management team has strong technical expertise and decades of experience growing and leading large companies. CEO Henri-Claude Bailly is a co-founder and former chairman and CEO of Hagler Bailly, Inc. and has long been a leader in the energy efficiency field. Dr. Nalin Walpita, Chief Technology Officer, has many years of experience with all aspects of thermal engineering. The company's directors bring both national and international experience in energy and manufacturing at the highest management levels.

Product Technology Profile

Solartrec's technology consists of variations to a thermodynamic cycle based on Rankine cycles, but, instead of utilizing vapor, it uses a liquid to vapor conversion within the engine or converter. The innovation of utilizing water within the engine creates three related advantages: high efficiency and reduced complexity and cost.

The water is heated either by a solar collector field or waste heat and can be utilized directly in the converter without an intervening heat transfer step. Due to efficiency enhancement methods the company has developed, theoretical maximum efficiencies approach Carnot levels within the heat engine cycle.

Markets and Applications

Because Solartrec's technology can use any thermal source to heat the liquid in the engine and can be scaled up or down virtually without limit, potential markets and applications are vast. Immediate plans are to develop solar thermal applications for: 1) residential installations (5-10kW); 2) commercial and industrial facilities (25kW-1MW); and 3) utility power plants up to 10 MW. Industrial waste heat recovery applications will be in the 25kW to 10 MW range.

Commercial Opportunity

There are commercial opportunities for Solartrec in three markets: distributed solar generation, base load utility and industrial waste heat recovery. These are large markets, and, beyond its intrinsic economic and technical advantages, Solartrec's technology will further benefit from federal and state policies and subsidies supporting energy efficiency.

Competitive Advantage

The Solartrec technology has competitive advantages in both the solar thermal and waste heat recovery spaces. Because of its unique thermodynamic cycle, Solartrec's solar thermal technology is cost competitive: in the range of 10-12 cents/kWh LCOE (levelized cost of electricity) without subsidy. This cost advantage is achievable because the engine is able to operate at much lower temperatures, enabling it to utilize a simpler design with fewer and less costly materials. Lower temperatures also allow for less expensive storage methods and materials. In the area of waste heat recovery, Solartrec's thermodynamic cycle results in a higher percentage of heat recovery than competing systems, leading to a better economic return and faster payback times.

Future Financial Plans

Solartrec has received several rounds of seed funding and is now seeking $4-6 million dollars in funding over the next three years. These funds will be used to:

1. Install four to six grid-connected beta prototypes, including both 24/7 solar and waste heat recovery units
2. Complete a detailed design of a 10 MW utility scale plant
3. Begin implementing a range of activities to support commercialization of the technology
4. Expand and deepen the IP base.

Solasta Inc.

Presented by:
Michael J. Naughton, CTO

Company Overview

Solasta is commercializing innovations in solar energy originally developed at Boston College. The innovation is based on nanotechnology that dramatically improves the efficiency of solar energy generation. This improved efficiency will help Solasta-based solar cells achieve a cost of electrical energy that is on par with conventional grid-based energy, thereby increasing the adoption of solar-based alternative energy generation and helping to reduce greenhouse gas emissions.

Officers and Directors

Michael Clary, CEO
Michael J. Naughton, CTO
Michael J. Burns,
Director of Research & Development
Nick Argenti,
Director of Process Engineering

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Product/ Technology Profile

Solasta utilizes its proprietary Nanocoax™ nanotechnology to improve solar photovoltaic power generation through a unique configuration that captures more light and harvests more power than conventional thin film cells. This technology is PV medium agnostic, such that efficiencies of many different thin film technologies can be improved with its implementation.

Markets and Applications

The addressable market for solar energy is over $50 billion in 2009 and is expected to continue rapid growth as the world adopts more alternative energy sources. Thin film systems are expected to displace crystalline PV as efficiencies of the former rise to meet or exceed those of the latter, accelerating the drive of cost per Watt toward grid parity. Ranging from amorphous silicon and other inorganic media, to OPV and polymer, adaptation of the Nanocoax™ configuration will lead this cost reduction.

Commercial Opportunity

The target customer base is all present and future thin film solar cell producers, since they can utilize the Solasta technology to increase the efficiency and lower the cost of their products. Solasta offers technology that will enhance our customers' product competitiveness within the overall solar market.

Competitive Advantage

The Solasta technology is fully protected by a large number of patents and trade secrets that will establish a lasting proprietary advantage over any similar competitive approach.

Future Financial Plans

The company is now moving from technical demonstration and feasibility to commercialization. We will shortly be in a fund raising mode to support full commercialization, including pilot facilities, sales and marketing staffs and all the other requirements for market entry.

Tomorrow BioFuels, LLC

Presented by:

Lawrence Dressler, President

Company Overview

Elevator Pitch: "Converting Greenhouse Gases into Green Power"

Mission: To provide sustainable, domestic fuel that reduces US dependence on foreign oil, reduces flue emissions and provides green power in populated areas. Our FALCON technology allows us to cost efficiently capture, store, handle and use carbon dioxide from industrial flue emissions as plant food for the commercial growth of algae. The algae will be converted into vegetable oil and biomass for production of green power products such as biodiesel and green electricity. No farm land or high loss irrigation systems needed.

Market Size: A portion of U.S. diesel demand (65 billion gal./yr) and a portion of the US power generation.

Competitive Advantage: FALCON Technology is an industry game changer because it allows us to capture and use CO2 economically resulting in faster algae growth with higher vegetable oil yield

Team: Management developed business model, patent technology, process and engineering. We utilize outside process & chemical engineers and other industry professionals.

Funding Goals: $1.450 million to be used for a portable FALCON system, install more programmable controls and increase the size of the growth reactor. New hires will be needed in the fields of engineering and biology.

Officers and Directors

Mr. Lawrence Dressler, President
Dr. Alexander Chirkov, Executive Vice President
Mr. Wally Long, Operations Manager

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Product/ Technology Profile

Tomorrow Biofuels (TBL) FALCON technology provides flue emission reduction (namely CO2). Our platform directs a percentage (up to 99%) of flue gas into a series of analyzers followed by our "Coat" (CO2 Absorption Tank) Vessel where the gas is diffused with FALCON Absorbent. After saturation the mixture is transferred to a holding tank. No pressurization or special liquefaction equipment in needed. Saturated FALCON is collected and used as a food source at our photoautroph growth centers.

Markets and Applications

Our market potential is dramatic for three reasons.

(1) Need to reduce greenhouse gases. Our FALCON absorption system can be installed at any company looking to reduce their flue emissions (ex. coal industry). We envision installing FALCON systems to bleed off commercial companies flue emissions in order to get them into government compliance.

(2) US has growing demand for energy. Analysts state that by 2025 the US will need 25% more electricity than current production. We will be producing green electricity.

(3) US Diesel fuel consumption is 65 bil gal/yr. We have a sustainable diesel replacement which will be algae based biodiesel that can be used for home heating oil (Northeast consumes +65%) and transportation fuel.

Commercial Opportunity

Tomorrow BioFuels has a sustainable solution to reduce CO2 while providing various types of green power. We will be a net consumer of CO2 and thus we developed the FALCON system to reduce our costs of obtaining and using the gas. Commercially we want to install the FALCON system at customers location and bleed off a percentage of the gas. We will charge a rental fee for our equipment, a service charge to remove their CO2 and participate in any Cap & Trade Markets.

We plan to target this industry through business alliances with existing emission reduction companies. Other strategies include Trade Shows such as EUEC (Energy & Environment Conference), Trade Magazines and direct sales.

TBL's main revenue will come from sales of green electricity, biodiesel and biomass products. We have a established a joint venture with a Massachusetts Company that produces and sells green electricity from biogas to the local utility grid. Our pilot plant will include a 300kw/h generator that will use biofuel. We have already identified various biodiesel blenders and consumers who are interested in our products.

Competitive Advantage

Our competitive advantage is we have a solution to a world problem which is the reduction of carbon dioxide. We will also be able to create and control our own feedstock production which provides an advantage over biodiesel competitors who use conventional unsustainable vegetable oils from the US Midwest.

Future Financial Plans

Tomorrow BioFuels is seeking up to $5 million dollars for start-up funding over two years. In September 2009 we reached our minimum amount of $530,000 which enables us to build a pilot plant. Additional funding will be used for a portable FALCON platform that can be used at potential clients sites, hire chemical and process engineers, marketing (website, tradeshows, PR, advertisement), additional bioreactor, automated controls and analyzers.

Trenergi Corporation

Presented by:

Charles A. Myers, President

Company Overview

Creation of an alternative energy global microCHP product family based on high temperature PEM fuel cells with multiple fueling options capable of seizing control of a $1B fast growing world market. The operating temperature of our core technology will allow us to provide electricity, heat and hot water directly from the fuel cell stack. Doing so simplifies our system, lowers manufacturing costs and reduces long term maintenance costs. The combined team of Dr. Enayetullah, Myers, Strate, Rosenburg, Taylor, Sabin and Schult have over 50 years of fuel cell experience and over 100 years of successful start up experience. We are seeking funding to construct a 1 kW Proof of Concept unit and initiate early field trials. We believe start full commercialization of one size microCHP in Year 3, a second size in Year 4 and the last size in Year 5 to create a global product portfolio. Based on this we plan to demonstrate positive cash flow in year 3 which in combination with the full portfolio in Year 5 will enable us to pursue our acquisition Exit Strategy.

Officers and Directors

Charles Myers, President
Dr. Mohammad Enayetullah, CTO & Secretary
Mort Rosenburg, CFO
Alden "Den" Taylor, Vice Chairman of the Board

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Product/ Technology Profile

Trenergi will develop microCHP (Combined Heat and Power) units, 1, 3 and 5 kW, for residential electrical power, heat and hot water. We will use, high temperature PEM fuel cells operating over 160oC, eliminating the need high purity hydrogen, simplifying the fueling equation, allowing the use of a fuel flexible system addressing world deployment. Operating this temperature we can use the stack for heat and hot water. This improves system efficiency, simplifies installations and lowers fuel usage. We will be able to operate on natural gas, propane, kerosene, landfill gas.

Markets and Applications

Trenergi is targeting global residential power with products that will be installed at the residence providing electricity/heat/hot water, offsetting grid power needs or as a technology to eliminate the requirement for a grid to be built. Appliance Magazine identifies our market in North America in 2008 as 2.2 million units per year. India has over 70 million residences without electricity. The potential in China is even larger. Trenergi solves the needs of these markets, providing a single unit that can generate electricity, heat and hot water and eliminate the need for a grid.

Commercial Opportunity

Our comprehensive financial payback model provides Trenergi with a roadmap that identifies which consumers are the best candidates for each stage of our company growth, from early field trials through commercialization. Using a wide range of inputs, the model points us to consumers who have optimal paybacks. To reach these consumers we will partner with regional boiler/heater manufacturers using their existing channels for sales and service. They benefit with the addition of a more efficient technology, movement into the energy sector and the ability to establish long term service programs.

Competitive Advantage

Versus the grid, our technology is more energy efficient. For those who do not have the grid, our technology provides electricity. Versus other fuel cell technologies targeting microCHP, we will offer longer service life, quicker response times, a simpler system, lower hydrogen purity requirements and lower manufacturing costs. Versus other internal combustion engine microCHP technologies we will offer equal response times, higher quality power (no variation), lower noise, and no vibration.

Future Financial Plans

- Year 1
  - 1 kW Proof of Concept (POC) completed
  - Complete Intellectual Property development
  - Start exploration of Manufacturing and Sales Alliances Partners
  - Raise next round to fund development
- Year 2
  - Produce 1 kW Beta pre-production units and ship to partners and users
  - Sign agreements with Sales Alliance Partners
  - Start developing 3 kW POC
- Year 3
  - 1 kW unit commercializes
  - 3 kW Beta units ship to partners and users
  - Start developing 5 kW POC
  - Company becomes profitable, reaches break even
  - Raise next round to fund expansion
- Year 4
  - 3 kW unit commercializes
  - 5 kW Beta units ship to partners and users
- Year 5:
  - 5 kW unit commercializes
  - Trenergi has 1 kW, 3kW and 5 kW units offering complete commercial global portfolio
  - Raise final round to fund global expansion

WindSea

Presented by:

Henning Arnøy, Managing Director

Officers and Directors

Henning Arnøy,
Managing Director

Contact Information

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Company Overview

The need for energy world wide is increasing. It is evident that this increase in a longer timeframe can not be covered by increased use of fossil energy sources only. The need for clean and sustainable energy sources will increase significantly. Wind energy is one of the more significant energy sources in this respect, with a generally rather mature technology. WindSea shall be the leading floating wind mill concept for large scale production of clean renewable electrical energy.

Product/Technology Profile

The basis for the WindSea floater design is that each self-contained vessel will perform its duties with minimal intervention as well as easily being moved into position. Perhaps the most attractive feature of the design is that moving the vessel into port for maintenance will be little more than a tow job. This flexibility means that WindSea floaters may be used singly or as part of a larger wind farm. In either case, to swap-out one floater will entail little more than making anchor and electrical connections.

To accomplish the ease of movement and stability, the symmetrical, “three-legged” vessel design provides a foundation for three, currently available 3.2-megawatt (MW) windmills, meaning each vessel can provide 9.6 MW of installed generator power.

The design is totally scalable which means that the when larger windmill turbines including generators are available, the WindSea concept can easily scale the design up to handle it. Increased turbine sizes are expect to have a minimal impact on the vessel design, as only modification of the ballast will be needed to ensure stability.

All together, the 3,500-tonne vessel will stretch up to about 100 meters from the ocean surface, with a draft of 23 meters when installed. Atop this will be the windmills themselves, each blade at approximately 50 meters.

At the frame’s lower level, a three-arm “star” connects the platform to the anchor system. Three anchors are connected at the symmetrical centre of the vessel to a vertical axis that allows free rotation of the vessel relatively the anchoring system.

The vessel is indented to rotate as a whole, so the turbines themselves will be fixed. Two rotors will face forward, into the wind, and the third faces to the back, and the rotor located at the stern of the vessel will be at a higher elevation than those located at the bow. This configuration ensures the vessel faces the wind for optimum power generation.

Markets and Applications

GWEC predicts that in 2013, global wind generating capacity will stand at 332 GW, up from 120 GW at the end of 2008. During 2013, 56.3 GW of wind generating capacity will be added, more than double the annual market in 2008. The year-on-year growth rates will average 22%, which is modest compared to an average increase of 28% over the last ten years.

The WindSea technology has a significant market potential for floating wing mills for water depths from approximately -50 meter. The locations (market area) is anticipated for areas with high or medium high wind energy density, offshore the coastline with water depth from approximately -50 meters

Commercial Opportunity

Target Customers:

Utility companies, “integrator companies” and turbine manufactures.

The plan seeks to emphasize for the utility companies (E.ON, DONG, Statoil etc.) the availability and potential of the technology and hence, the economical potential. For the “integrator companies the potential for being the EP / EPCI contractor for delivering a large number of units to the wind mill park developers. For the turbine producers, the potential to be the supplier of turbines to the leading concept for floating wind mills.

Competitive Advantage

Based on standard submersible construction. Efficient construction. Easy towable to / from yard. No need for large crane vessel or barge. Easy access and space for maintenance. Self oriented against the wind. Stabile sea movements. Draft only 7 meter during transport and 22 meter installed. Centre connection of anchor lines and cable through turret. Efficient maintenance and repair.

Coastal areas and coastline is under pressure. By locating windmill parks offshore, the majority of the obstacles can be reduced or eliminated.

Future Financial Plans

To achieve funding for further development all up to full commercialisation .This includes required engineering work, model testing, building and testing prototype

Divided in:

- P1 “Evaluation and Optimization”. Completed 31.12.2009. Funding by present owners
- P2 ”Development of Concept”. Estimated start 1.1.2010 with estimated completion date 1.3.2011.Additional funding required
- P3 “Prototype”. Estimated start 1.3.2011 with estimated completion date 1.9.2013.Additional funding required
- P4 “Test Prototype. Estimated start 1.9.2013 with estimated completion date 1.9.2014

Exhibitor Profiles

**See Sponsors Section of the Notebook for more information on these organizations.*

Note: All Startup Companies in the Pitch Sessions, Conference's Sponsors, Organizers, and Non-profit Affilates also have Exhibit Tables.

**See Sponsors Section of the Notebook for more information on these organizations.*

AirMotion Sciences, Inc

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AirMotion Sciences' Big Smart Fans have been designed to conserve the use of energy resources by moving air more effectively and efficiently than other HVAC solutions. The versatility of our Variable Pitch, Speed, and MultiMode Control capabilities create more comfortable facility environments while generating significant energy cost savings and rapid payback.

Bandgap Engineering, Inc.

Chris Hobson

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Bandgap's mission is to bring solar energy to grid parity by engineering high efficiency silicon-based photovoltaic cells using proprietary, low cost nanotechnology. Founded in 2007, the company is venture-backed by New Enterprise Associates, Sumitomo Corporation and the Massachusetts Green Energy Fund and based in Waltham, MA.

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**See Sponsors Section of the Notebook for more information on these organizations.*

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in collaboration with **Atlantic Canada Opportunities Agency**

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International Green Technology Trade Center (IGTTC128)

Joshua Levitt

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The International Green Technology Trade Center (http://IGTTC128.com) was created to become the destination “where the world meets to trade green.” Our permanent trade center concept was designed to promote, market and generate sales for 250+ of the world’s most innovative Cleantech companies.

**See Sponsors Section of the Notebook for more information on these organizations.*

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PR Newswire*

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**See Sponsors Section of the Notebook for more information on these organizations.*

Pulse Tidal

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Pulse Tidal is currently operating a Tidal Power plant in the shallow waters of the Humber estuary, UK. Our technology reduces cost and risk in tidal power project development. An experienced team, proven technology & $12m public funding position the company to deliver outstanding investment returns.

SETsquared Partnership

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SETsquared is the collaboration between the Universities of Bath, Bristol, Southampton and Surrey partnering in enterprise and collectively supporting the growth and success of new business opportunities through spin-outs, licensing and incubation. We have supported over 100 high tech, high growth companies raising over $500m, generating over 1,200 jobs.

SouthCoast Development Partnership*

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**See Sponsors Section of the Notebook for more information on these organizations.*

Spire Corporation

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Spire Corporation is a global solar company providing turnkey solar factories and equipment to manufacture PV modules and cells worldwide and providing systems for the commercial and federal US market. Spire puts you in the market quickly and ready to compete with the leading technology and knowledge required for success.

Sunlight Solar Energy, Inc

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Sunlight Solar Energy, Inc is dedicated to educating customers and empowering them to make intelligent solar buying decisions. Sunlight Solar Energy, Inc is committed to providing our customers with the highest quality grid-tied solar electric & solar thermal installation for their home or business. As one of the leading photovoltaic & solar thermal design and installation contractors in the US, we are proud to be a SunPower Premier Dealer and to offer SunPower components to our customers.

**See Sponsors Section of the Notebook for more information on these organizations.*

Sustainable Energy Developments, Inc.

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Sustainable Energy Developments, Inc. (SED) is a company focused on the development of high quality, economically beneficial, decentralized wind projects in the Northeast. This work includes technical feasibility assessments, permitting, design engineering, construction and operations/maintenance for wind projects ranging in size from 10 kW to 10 MW. Founded in April 2002, SED has provided over seven years of professional wind development and resource assessment expertise to state agencies, municipalities, businesses, schools, farms and homeowners.

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University of Bath

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The University of Bath has leading interdisciplinary research expertise in energy, sustainability and the environment via its Institute for Sustainable Energy and the Environment (I-SEE) and works closely with industry in this sector through its networks: Low Carbon South West, Carbon Trust Incubation Network and SETsquared.

**See Sponsors Section of the Notebook for more information on these organizations.*

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Notes