

Panel 1: Business Models for Commercially Viable Mini-grids

Christine Eibs Singer
Finance Lead Consultant
Sustainable Energy for All Initiative



Ms. Christine Eibs Singer is a strategic advisor to multi-lateral and other development organizations on the design and implementation of innovative public private partnerships that accelerate the finance and delivery of sustainable energy products and services.

Ms. Singer is currently a Senior Advisor to the United Nations Sustainable Energy for All Initiative, focusing on the development of financing innovations to accelerate energy access. She is the Co-Founder and former CEO of E+Co, a pioneer in the impact investment sector. She led E+Co's growth from a start-up in 1994 to an international leader in developing country energy access finance, enabling E+Co to empower more than 190 local, small and growing enterprises that supply clean and affordable energy to 8 million people in developing countries, producing social, environmental and financial returns.

Ms. Singer was a member of the United Nations Secretary-General's High Level Group on Sustainable Energy for All, integrating ground-level lessons into the energy access action agenda. Recognizing the critical role of small and medium enterprises to increased energy service delivery in developing countries, Ms. Singer was a founding member of the "Aspen Network of Development Entrepreneurs" (ANDE). Ms. Singer served as the Chair of the GMSA Innovation Challenge Investment Committee, assessing new opportunities for integration of mobile channels with energy and water delivery. Ms. Singer serves on the Board of SELCO India and the Dalberg Trust, and is a member of the Investment Committee of the Deutsche Bank Essential Capital Consortium.

Ms. Singer spent 10 years at the Port Authority of New York and New Jersey, concentrating on the development of public-private partnerships. She is an Honors graduate of Douglass College and the Eagleton Institute of Politics, Rutgers University. In 2007, Ms. Singer received the Woman of Inspiration Award from Fairleigh Dickinson University and in 2011, was awarded the Keystone Leadership Award for the Environment. In 2011, Ms. Singer received an Honorary Doctorate of Humane Letters from New Jersey City University.

Didar Islam

Founder

SOLARIC



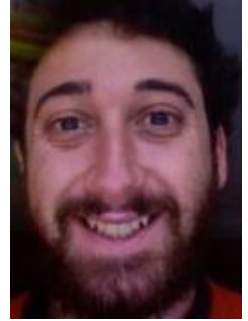
Didar Islam has founded SOLARIC in early 2009, an R&D driven technology company in Bangladesh focusing on developing appropriate technologies for off-grid Solar applications. Single-chip radio known as QWIKRADIO is one of his famous innovations which earned him 10 US patents and the technology became a successful product-line for applications such as garage door opener.

He graduated from BUET in 1992 in electrical engineering, served as a faculty member in BUET for 1 year and then went to University of Florida, Gainesville and earned his MS in EE in 1996 and Ph.D remained unfinished. He had worked for MICREL, UNITRODE in the past and also been with MAXIM, the leader of analog semiconductor company, as a design director for 3 years before returning to Bangladesh in 2007 after having been in the US for 15 years.

Since 2009, Didar is engaged in practical impact oriented research developing appropriate technologies to deliver renewable energy to millions of off-grid homes. One of his most successful innovations is the utility level (120V) solar home system also known as “**3G-SHS**”. This patented technology helped overcoming the barriers of low voltage solar systems and enabled thousands of off grid user every month to use any standard appliance including charging their mobile phone, TV, fan etc. Another breakthrough is the **NANO grid**, a pre-paid meter based low-cost community solar system that removes the need for expensive inverter and yet provide all the benefits of having an inverter in the off-grid areas. As a result, SOARIC has been successful in delivering solar energy to off-grid population on a commercial mode.

Fabio De Pascale

Chief Energising Officer, Co-Founder
Devergy



Fabio De Pascale is the co-founder and Chief Energising Officer at Devergy. Devergy is a social energy utility, which provides an affordable and reliable electrical service to low-income people not connected to the power grid in Tanzania. The service is based on village-sized energy micro-grids, which use an innovative approach to provide solar power to households and small businesses; the users can use lights and appliances, and seamlessly grow their energy consumption from a few to hundreds of watts. Devergy successfully validated its business model, and it working towards connecting 250000 people in rural villages to electricity by the end of 2018.

Prior to Devergy, Fabio was Project Manager at the European Space Agency, dedicated to Sounding Rocket and Satellite microgravity research projects. There he managed and supported the successful interaction between international government agencies and the private sector, together with their financial and political implications. Fabio managed teams of 100+ persons working on multi-year projects with complex technological and scientific challenges.

Fabio received a B.Sc. in Space Engineering from the Politecnico di Milano University, as well as a M.Sc. in Aerospace Engineering in Aerospace Engineering at the Technische Universiteit Delft. He also spent one year specialising in Space Systems Engineering at the Technische Universität München.

Chris Hornor

PowerHive

President and CEO



Chris is an entrepreneur and recognized pioneer of consumer renewable energy product and services. During the last 15 years he has delivered renewable energy to more than two million people. As founder and CEO of Better Energy Systems he launched Solio, a portable solar charger that defined a new category of small-scale consumer energy solutions. In 2008 Chris led the expansion of Better Energy Systems into East Africa where he and his team introduced Club Solio, leveraging mobile money to create the first pay-as-you go renewable energy service for remote, off-grid regions. Chris has held senior posts at technology startups in the US, UK, and Japan where he identified and developed new revenue streams through emerging internet applications. He is a graduate of the University of California, Santa Barbara.

Nikhil Jaisinghani

Co-Founder
Mera Gao Power



Nikhil is an experienced entrepreneur having co-founded Value Development Initiatives, a Nigeria-focused energy infrastructure company, and Mera Gao Power (MGP), an Indian company that builds and operates micro grids in North India. He is currently responsible for fund raising at MGP.

While co-founding MGP, Nikhil designed a low cost solar powered micro grid capable of serving off-grid households with priority energy needs. Because these micro grids can be built for under \$1,000 per hamlet, are fully automated, and have limited O&M needs, MGP's micro grid design has been highlighted by MIT's Technology Review magazine, National Geographic's Terra Watt Prize, the World Economic Forum's 2015 Technology Pioneers awards, and the World Wildlife Fund.

Prior to his entrepreneurial endeavors, Nikhil worked at the U.S. Agency for International Development as a project development officer, assembling public private partnerships in Nigeria. He has also lived in Nepal, working as a Peace Corps volunteer. Prior to that, he started his professional career working as a software developer in Silicon Valley and Northern Virginia.

Panel 2: Financing for Commercially Viable Mini-grids

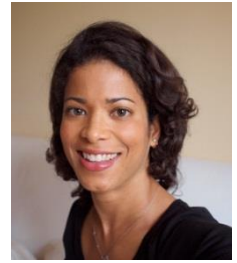
Ms. Nicola Armacost
Managing Director
Arc Finance, Ltd.



Nicola Armacost is the Managing Director of Arc Finance; formed in the spring of 2008 to link the fields of finance, energy, water and sanitation. Niki is responsible for overall management and strategic direction at Arc. She leads implementation of the USAID funded Renewable Energy Microfinance and Microenterprise Program (REMMP) and the PACE-D technical assistance program both of which have India-specific microgrid components. Niki is an advisor to a number of energy/finance organizations including Distributed Capital (financial services, USA), Frontier Markets (distribution systems, India), SIMPA Networks (payment systems, USA/India), Angaza Design (solar pay-as-you-go system, USA and Tanzania), Lumeter Networks (pre-paid metered off-grid electricity), USA, India and Peru), Azuri Technologies (solar pay-as-you-go system, UK and Uganda), EcoZoom (clean cookstoves, USA) and Grameen Greenway (clean cookstoves, India). Niki is the Co-Chair of the Investment and Finance Working Group, of the UN Foundation's Sustainable Energy for All Practitioner Network. She also serves on the Board of MISFA (the donor consortium for microfinance in Afghanistan), the Buksh Foundation (MFI, Lahore, Pakistan) and is a Trustee of the Village of Hastings-on-Hudson in New York, USA.

Previously, Niki worked at Women's World Banking, a global microfinance network where she was part of the Senior Management Team. Niki has a Bachelor's degree in international relations (University of Toronto, Canada), an LLB (Queen's University, Canada) and an LLM (Osgoode Hall Law School, Canada).

Pepukaye BARDOUILLE,
Senior Energy Specialist, Energy & Efficiency Advisory,
International Finance Corporation (IFC), World Bank Group



Pepukaye - Pep - Bardouille is passionate about sustainable economic development, social justice, and access to basic services, particularly water and energy. A Senior Energy Specialist with the International Finance Corporation (IFC), part of the World Bank Group, she currently leads much of the institution's work on Energy Access, focusing on developing and helping to scale-up innovative, commercially-viable business models to extend electricity and clean fuels to the base of the pyramid. Most recently, Pep has spearheaded projects in South Africa (supporting the country's Department of Energy on defining a new National Roadmap for Universal Household Electrification), Ethiopia (grid-connected geothermal sector strategy) and Tanzania (mini-grids), and is supporting projects in India and Bangladesh as part of IFC's Lighting Asia off-grid programme. She has also penned a number of thought-pieces on the topic, including *From Gap to Opportunity: Business Models for Scaling Up Energy Access* (IFC, 2012) and "How a New Breed of Distributed Energy Services Companies can reach 500mm energy-poor customers within a decade" (with Dirk Muench, 2014).

Prior to joining IFC, Pep was a Young Professional with the World Bank, and before that spent 6 years in management consulting with McKinsey & Company based in Copenhagen and London, where she served top teams from leading companies as well as public sector clients in the power, oil, gas and mining sectors, and on socio-economic development issues. She began her career with the United Nations' Development Programme in New York, where her interest in the energy-sustainable development nexus emerged.

Pep holds a BSc. in Mechanical Engineering (Illinois Institute of Technology, USA), MSc. in Environmental Management (l'INSA de Lyon, France), and PhD in Environmental and Energy Systems (Lund University, Sweden).

Christopher Aidun
Managing Partner
Persistent Energy Partners LLC



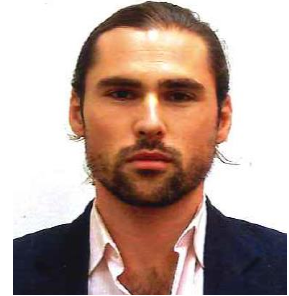
Chris is a co-founder of Persistent Energy Partners (PEP), an investor, incubator and advisor in the emerging distributed renewable energy sector in sub-Saharan Africa. PEP has managed a portfolio of over 45 clean energy investments in nine sub-Saharan countries and has launched Persistent Energy Ghana, Ltd., the leading distributed energy services company (DESCO) in Ghana.

Chris has over thirty years of experience in venture capital, private equity and debt finance. Prior to founding PEP, Chris was Managing Director of E+Co, a nonprofit clean energy impact investor. He led a financial restructuring of E+Co that has returned to creditors significantly more than they expected. Prior to E+Co, Chris was a senior private equity partner at the global law firm Weil, Gotshal & Manges LLP.

Chris has an LLM from New York University School of Law and a BS from the University at Albany.

Jonathan Kirschner

Portfolio Manager, Development Innovation Ventures
U.S. Agency for International Development



Jonathan is a portfolio manager for USAID's Development Innovation Ventures. He leads efforts on supporting organizations in DIV's portfolio and is actively engaged in selection and strategic management. Jonathan also supports USAID's Global Development Lab in developing a new finance facility for early stage innovators.

Prior to joining DIV, Jonathan worked as an early stage investor, focused on emerging markets. During his time at Mesoamerica, a Colombia private equity fund, he helped build out the portfolio team. Previously, he helped to build the education-focused VC fund Gera Ventures in Brazil. Jonathan spent four years as a consultant at Bain in New York and South Africa where he focused on private equity and strategic consulting. He worked as head of international expansion for Brazilian IT services start-up, CPM Braxis. He was a co-author of Success in Africa, a book on business in Africa.

Jonathan has an MBA from the Stanford Graduate School of Business, an MPA-International Development from the Harvard Kennedy School, and a BA from Georgetown's School of Foreign Service and Oxford University. Originally from New Mexico, he speaks fluent Spanish.

Brinda Ganguly
Associate Director
Rockefeller Foundation



Brinda Ganguly joined the Rockefeller Foundation in 2008. As an Associate Director, she manages the Foundation's Program Related Investments (PRI) portfolio and works on the Impact Investing initiative, which seeks to catalyze an efficient industry that can deploy investment capital to solve social challenges at scale. Prior to joining Rockefeller, Ms. Ganguly was a Vice President in Citigroup's Corporate Bank, where she provided corporate finance solutions to healthcare clients. Earlier in her career, she worked at the Soros Foundation, originating and executing PRIs on behalf of the Soros Economic Development Fund, and at Charles River Associates as an economic consultant. Ms. Ganguly serves on the Executive Committee of Mission Investors Exchange, an organization that promotes impact investing, as well as on the President's Advisory Council for Bryn Mawr College. Ms. Ganguly received a bachelor's degree in Economics and Spanish from Bryn Mawr and an MBA from Columbia Business School. She lives in Brooklyn with her husband and daughter.

Panel 3: Emerging Technologies and Strategies for Scaling up Mini-grids

Johannes F. Linn

Senior Fellow
Brookings Institution



Johannes Linn is a Resident Senior Scholar at the Emerging Markets Forum in Washington, D.C., and a Non-resident Senior Fellow at the Brookings Institution, and currently serves as the chair for the 10th Replenishment Consultation of the International Fund for Agricultural Development. From 2005-2010 he was Director of the Wolfensohn Center for Development at Brookings. Prior to joining Brookings in 2003, he worked for three decades at the World Bank in various capacities, including as the Bank's Vice President for Financial Policy and Resource Mobilization (1991-1995) and Vice President for Europe and Central Asia (1996-2003). Johannes Linn has published extensively on development and global governance issues, including a book that he co-edited on Getting to Scale: How to Bring Development Solutions to Millions of Poor People (Brookings Press 2013). His current research interests and recent publications are in the areas of development effectiveness (with a special focus on scaling up successful development interventions), on global governance reform, and on regional cooperation (with a special focus on Central Asia). Linn holds a Bachelor degree from Oxford University (1968) and a doctorate in economics from Cornell University (1973).

Unai Arrieta Salgado

Project Manager

Trama Tecnoambiental (TTA)



Mr. Arrieta is a Project Manager at TTA for Latin America and the Caribbean region, since 2012 he is based in São Paulo, Brazil

He has experience with rural electrification with renewable energies and micro-grids as a consultant: he has recently worked for the European Union Delegation in Mozambique in the identification of projects for rural electrification and “Sustainable Energy for All” objectives; he was also field engineer for a consultancy of a hybridization project in the Amazonas region in Colombia and a project for a micro-grid-based electrification strategy for an international NGO in Haiti. Also, he was an analyst for the consultancy assignment of the final evaluation of the Renewable Energy Program for Disperse Markets in Argentina (PERMER) that reached more than 30,000 households, schools, health centers, and public buildings in rural remote areas. Currently he is project manager for the engineering of a 200 kWp installation in a hospital in Haiti.

Besides rural electrification, Mr. Arrieta has experience with sustainable building and energy efficiency; for example, he was a consultant for the “Energy Efficiency Guidelines for Office Buildings in Tropical Climates” assignment for the OAS.

Mr. Arrieta received his M.S. in Mechanical Engineering from the Polytechnic University of Barcelona, School of Industrial Engineering and in 2010 he completed European Commission’s Master Programme in “Management and Engineering of Environment and Energy – ME3”. He developed the Master’s Thesis at the Passive House Center in, Sweden, dealing with PV generation at municipal scale.

Mr. Arrieta has participated in international projects in Lebanon, Mozambique, Costa Rica, Colombia, Haiti and the Caribbean (region), besides his academic experience (France, Sweden).

Besides engineering and consultancy projects in renewable energies and sustainable buildings, Mr. Arrieta is a tutor and course coordinator in the “Engineering and Management of Renewable Energies” on-line Master course at IL3-University of Barcelona. He is a chartered engineer at the professional Association of Industrial Engineers of Catalonia.

Allison Archambault
President
EarthSpark International



Allison is president of EarthSpark International, a non-profit organization working to eradicate energy poverty through sustainable business models that deliver sustainable energy services. EarthSpark develops supply chains and distribution channels for small-scale clean and efficient energy technologies in Haiti, and it is also developing micro-grids in areas underserved by the existing electricity grid.

Prior to her work with EarthSpark, Allison founded Fresh Generation, LLC and consulted to clean energy companies, governments, and advocacy groups. She also served as Business Liaison Director for 3TIER, leveraging 3TIER's resource forecasting and mapping to expand renewable energy siting and integration insights around the world. Allison also led the renewable energy partners program for GridPoint, a leading clean tech company in the smart grid space. She has a background in US grid-tied residential solar and residential demand management and in rural solar electrification in the Caribbean and West Africa. She holds a B.A. in International Relations and Economics from Tufts University.

Dr. Vijay Modi, Professor of Mechanical Engineering

Columbia University

Member, Earth Institute Faculty, Columbia University

Director, Sustainable Engineering Lab



Professor Vijay Modi is Professor and past-Chair of Mechanical Engineering in the School of Engineering and Applied Science and at the Earth Institute, Columbia University. Between October 2011 and 2012, he was a member of UN Secretary General’s High-level Task force on “Sustainable Energy for All” and he currently leads the Sustainable Development Solutions Network working group on Energy Access for All.

He received his Ph.D. from Cornell University in 1984 and worked as a post-doc at MIT from 1984 to 1986 before joining the faculty at Columbia University. Prof. Modi’s areas of expertise are energy resources and energy conversion technologies. His laboratory, the Sustainable Engineering Lab (SEL), has been responsible for technologies such as “SharedSolar” and widely used tools such as “Network Planner” and a free open-source app called FormHub, used over a million times.

While his early work was on computational fluid dynamics and micro-electro-mechanical systems, his recent work has been on energy infrastructure design & planning; solar energy; energy efficiency in agriculture, data analytics spanning from urban settings to remote rural settings.

He is currently working closely with city and national agencies/utilities to understand how energy services can be more accessible, more efficient and cleaner. His recent project on mini-grids is providing a unique understanding of consumer behavior, demand for energy, and business models for deploying energy solutions and energy efficiency.

Piyush Mathur
Chief Financial Officer
Simpa Networks



Mr. Piyush Mathur is the Chief Financial Officer (CFO) of Simpa Networks, an award-winning energy access company, using innovative pricing and packaged finance models to make energy accessible and affordable for the rural poor in India. As the CFO, Mr. Mathur is responsible for the financial stewardship of the business to ensure a healthy and growing portfolio of customers and financial sustainability of the business.

Mr. Mathur is a private equity and corporate finance professional with over 15 years' experience in Investments, Cross-Border M&A and Capital Raisings. Immediately before Simpa, Mr. Mathur was a Director in Kleinwort Benson Bank where he established and led the Principal Investments and Advisory business. During this time, Mr. Mathur aggregated a 24MW portfolio of solar mini-grids (<1 MW) and small scale grids (1-10 MW) in Southern Europe and an agro-forestry and also invested in a commercially run fisheries business in West Africa aimed at providing sustainable livelihood to rural communities.

Earlier, Mr. Mathur was a Partner in Frontiers Capital, a private equity firm, where he originated, invested and managed a number of investments in high growth TMT companies like Ink Publishing, Digital Route, weComm, Envirofone and EGS. Prior to that, Mr. Mathur was at KPMG where his projects included cross-border M&A for global clients like Cisco and Cemex.

Mr. Mathur has also worked in Strategy Consulting with Marakon Associates where he notably advised the Board of DeBeers on rebalancing their mine investment portfolio and senior executives of BP Alternative Energy on restructuring previously wholly owned wind and solar investment portfolio to receive external capital.

Throughout his career, Mr. Mathur has worked closely with senior business leaders of growth-stage businesses on high-value projects e.g. Market entry, product launches, licensing, business portfolio review, commercial contracts and JVs.

Mr. Mathur is a qualified Chartered Accountant and trained with Deloitte. Mr. Mathur received an honors degree in business from University of Delhi and has received MBA from London Business School.

Panel 4: Regulatory Frameworks and Policy for Mini-grids

Bernard Tenenbaum

Independent Energy and Regulatory Consultant



Dr. Bernard Tenenbaum is an independent energy and regulatory consultant. He has served as a lead advisor to the World Bank on power sector reform and regulation projects in Brazil, China, India, Mozambique, Tanzania and Nigeria. He is a co-author (with Chris Greacen, Tilak Siyambalapitya and James Knuckles) of the World Bank book *From The Bottom Up: Using Small Power Producers to Promote Electrification and Renewable Energy in Africa*. Since its publication in February 2014, the book has been downloaded more than 7,000 times from the World Bank's website. A French translation of the book will be published in 2015. Before joining the World Bank in 2000, he served as the Associate Director of the Office of Economic Policy at the U.S. Federal Energy Regulatory Commission. He is an author or co-author of *Regulation by Contract: A New Way to Privatize Electricity Distribution?*; *Governance and Regulation of Power Pools and System Operators: An International Comparison*; *Electrification and Regulation: Principles and a Model Law*; and *A Handbook for Evaluating Infrastructure Regulatory Systems*. He is a member of the editorial board of the *International Journal of Regulation and Governance*. He is a Phi Beta Kappa graduate of Colgate University and received his Ph. D. in economics from the University of California, Berkeley.

Mayank Bhargava

Co-Founder, CEO & Managing Director
NextGen Solar USA
NextGen Solawazi (Tanzania)



Mayank is the Co-Founder, CEO & Managing Director of NextGen Solar, a US based Renewable Energy SME focused in leveraging Private Sector investments in infrastructure development opportunities in Sub-Saharan Africa – not only to help growth & economic development of the African nations, but to help create jobs and lasting commercial opportunities for entrepreneurs in the US and Africa.

The objective of NextGen Solar is to bring plentiful, reliable and more affordable electricity by reducing the dependency on expensive fossil fuels and reduce carbon footprint of power production.

NextGen Solar is an official Private Sector partner of US Government’s Power Africa Initiative. Its business model is to build and operate mini-grid connected large scale PV Solar power plants in Sub-Saharan Africa - integrating a hybrid model of modern PV generation with existing legacy diesel generators at the mini-grids. NextGen Solar has set up operations in Tanzania, Kenya & Uganda. In Tanzania, it has been awarded a Provisional License to add up to 40MW in capacity and is currently in an advanced implementation stage of a 5MW isolated mini-grid connected solar power plant in the Kigoma district (target completion Q1/2015), prior to scaling up in other similar rural isolated mini-grid locations in rural Tanzania. The project is registered with Rural Energy Agency (REA) for The World Bank’s CDM PoA for Green Generation/Carbon Credits.

For project implementation, NextGen Solar works across the various government agencies under the Power Africa Initiative. Project funding is from OPIC, Technical Assistance from USTDA and “on-the-ground” policy assistance partnership with USAID. NextGen Solar is one of the first private sector companies to be awarded project development financing under the US Africa Clean Energy Finance (ACEF) initiative. In addition, NextGen Solar has close working relationship with the US Embassy, State Department, DOE and MCC.

Mayank is based in Washington DC. He is a former banker - he spent 18 years with Citigroup where he conceived, developed and launched new banking & finance businesses in the USA, Asia and Europe. In his last assignment he was head of an \$18 billion Home Equity wholesale business for Citibank USA which he built from scratch. Mayank was born in India, is a US citizen, obtained his BA (Honors) in Economics at University of Delhi and an MBA from the Indian Institute of Management, Ahmedabad, India.

Alakesh Chetia

President,
SunEdison Social Innovations



Alakesh Chetia joined SunEdison as an Advisor and studied the various segments of the SunEdison global businesses with special focus on hybrid and innovative solutions for the solar market while based out of SunEdison headquarters in California. In the summer of 2013 he relocated to India to head the SunEdison Eradication of Darkness (SEED) initiative as the Managing Director of Rural Electrification. In 2014 he returned to SunEdison headquarters to lead SunEdison Foundation and Social Innovations. He is passionate about transforming lives through innovation.

Prior to SunEdison, Alakesh held positions of Vice President and General Manager at Cypress Semiconductor, Chief Operating Officer at TransEDA and Chief Executive Officer at iMODL.

Alakesh holds an MSEE degree from Michigan Technological University, and a BE in Electrical and Electronics Engineering from National Institute of Technology, Karnataka.

Yashraj Khaitan
Founder & CEO
Gram Power, Inc



77 million households in India don't have access to a basic resource – electricity. Moreover, while supplying power to the remaining population, India's electricity distribution companies lose over \$25 Billion annually primarily due to theft and pilferage.

Yashraj Khaitan is the Founder and CEO of Gram Power, an energy technology company out of University of California – Berkeley that is working on introducing a new paradigm of power distribution in rural areas. Their smart microgrid technology was selected among the top 10 cleantech innovations from around the world, by NASA in 2011. In just 2 years of commercial operations, Gram Power has come a long way from initially focusing on off-grid rural India to now expanding operations to Africa and bringing their technology to the national grid in India. As per Yashraj's estimates, if their technology can save just 5% of power distribution losses in India, the savings generated alone can electrify all the 77 million unelectrified households in 4 years.

Yashraj started working on Gram Power when he was 19 and prior to that worked on cutting edge solar cell research as a high school student. He completed his B.S. in Electrical Engineering and Computer Science from the University of California – Berkeley and then opted out of his post-graduate program to work on Gram Power permanently.

Michael Gratwicke
Head of Energy
Rift Valley Corporation



Mr. Michael Gratwicke co-founded and leads Rift Valley Energy, a company which has been a path finder for the development of industrial scale renewable energy generation and distribution projects within both Tanzania and Zimbabwe.

In Tanzania, Michael developed the 4 MW Mwenga Hydro project, which was the first greenfield Standardized Power Purchase Agreement (SPPA) to be undertaken. This project included the establishment of the first privately licensed Distribution business in Tanzania, which has continued to rapidly grow in a commercially sustainable manner, whilst operating at retail tariffs that are at, or below the national grid tariffs. An important part of the sustainability of the distribution side of the business was the development of M-Luku – an innovative cell phone based pre-paid electricity vending system that allows small quantities of electricity to be profitably retailed to a large number of very remote rural customers. Michael is the appointed representative on the EWURA (Tanzanian Regulator) SPPA Working Group, which reviews the year on year tariffs applicable to SPPA operations in Tanzania.

In Zimbabwe, Michael developed a 0.5 MW (electrical) / 5 MW (heat) Combined Heat and Power station that currently operates at a tariff that is below that of the National grid. This project also involved the development of the first power banking agreement with the National Utility.

Rift Valley Energy continues to develop its future project pipeline, which is currently focused on a collection of hydro projects totaling 150 MW, each typically having an associated rural mini grid.

Michael is a mechanical engineer who has been a part of what is now the current Rift Valley Corporation over the last 20 years. He is Zimbabwean born and educated, and passionate about the sustainable development of Africa.