

## SETF team for EmeraldCarbon, SynergyGaz & ZEGOR initiatives



**Irvin Davis – Founding Director and President.** Mr. Davis has broad experience in industry, economic development and socioeconomic initiatives. He has held senior/executive positions in the mining/mineral processing industry, in the high-carbon/specialty steel sector, wire & cable (of steel, copper and aluminum), and in ultra-high performance electronic materials. He managed operations for nationwide programs (federally-funded) to expand industrial and high-technology capabilities. He is an active inventor in new technology for clean energy, metallurgical process and electronic materials. Mr. Davis received a B.Sc. in Mathematics from Roosevelt University in Chicago. He also completed graduate-level studies in physics, mathematics, and electrical engineering at Howard University and at DePaul University in Chicago.

**Yvonne Adams – SETF Director and Treasurer.** Mrs. Adams has acquired extensive financial management experience in mining and heavy industry and in electric power utilities. She managed budgeting operations for the PEPCO Electric System Group and has held leadership positions in other nonprofit organizations for educational and community development. Mrs. Adams received an MBA – Accounting/Financial Management from George Washington University, and a BA in Business Administration/Accounting from Howard University.

**Paulette Powell – SETF Director and Energy and Power Systems Advisor.** Mrs. Powell served as Principal Engineer of PEPCO (a major power utility for DC metro area), providing guidance and technical advice to PEPCO senior management. She brings to SETF a well-founded vision of future power technology and valuable contacts in the domestic and international energy/power communities. Mrs. Powell received an MBA – Science Technology and Innovation from George Washington University, and a B.Sc. in Electrical Engineering (BSEE) from Howard University. She is a Maryland licensed professional engineer, member of the National Society for Professional Engineers, and a senior member of the Institute of Electrical and Electronics Engineers.

**Nathaniel Quick – SETF Director and Science and Technology Advisor.** Dr. Quick is the President of AppliCote Associates, LLC in Orlando, FL. He is a prolific inventor/co-inventor on 58 patents issued by the USPTO, of which he owns 39. He is a proven R&D executive with experience in guiding multidisciplinary teams in the formulation of new technology. At Bell Laboratories, he participated in the development of novel electronic materials aimed at cost-reduction for high-performance electronic devices. Also, as a foundation staffer in an earlier period, he led the science and technology aspect of the revitalization of a large high-carbon/specialty steel fabricator and was responsible for several crucial process innovations. He is experienced in powder metallurgy, composite materials, carbon fiber fabrication, and materials engineering through laser/plasma-guided reactions. He has also authored over 60 technical papers. Dr. Quick received a Ph.D. in Materials Science and Engineering from Cornell University. Additionally, he is past president and currently a fellow of the Laser Institute of America, and a past member of the U.S. Army Science Board.

**Donald Redmond – Investor Relations Officer.** Under the direction of the Treasurer, Mr. Redmond will develop equity and debt financing sources to mobilize project funding. He has over a 30-year background in commercial and real estate banking and finance; public-private partnerships; real estate development; community and economic development (with a particular emphasis on working with community groups, political leaders and individual community residents in the area of affordable housing development); electoral politics; and non-profit management and strategic planning. He has also worked extensively in the areas of entrepreneurial business packaging, planning, development, procurement, and finance. Mr. Redmond received an MBA – Finance and Information Systems from the University of Pennsylvania’s Wharton Graduate School of Business and a B.Sc. in Business Administration and Computer Science from Drexel University. He is Co-Founder/former President of the 52nd Street Community Development Corporation; a Member of Omega Psi Phi Fraternity, Inc. He is a Principal of Sydney Lei & Associates.

**Erica Ifill – Economic Analyst.** Under the direction of the Treasurer, Ms. Ifill will monitor business operations, and through corporate and project budget review, assures the economic performance of SETF energy, mining/metallurgy, and other industrial programs. Further, she tracks the global performance of industries in which SETF participates –

now and in the near future – and periodically briefs management on her findings and suggested actions. She served for many years in the Canadian Department of Finance in Ottawa. In the Economic and Fiscal Policy Branch, she focused on analyzing federal revenues and expenditures. In addition, she coordinated the development, assembly, and presentation of the federal budget and the budgetary process. Ms. Ifill received an MA in Economics from University of Calgary, Alberta and a BA (Honors) in Economics from Queen's University, Kingston, ON, Canada.

## **OPERATIONS**

**Charles Kome – Mega-farming Manager.** Dr. Kome has worked in the private and academic sectors as a crops, soils and environmental scientist for over 23 years. He served as Assistant Professor of Soils and Environmental Sciences at the University of Louisiana at Lafayette where he taught, among other courses, soil microbiology, chemistry, soil and water conservation and fertility. He also taught World Crops for five years in the Department of Renewable Resources, covering the production of sugar, food, and fiber crops. He has been engaged in modeling limits of farm residue removal for biofuel and other uses that will not compromise soil quality and land use sustainability. He is currently involved in Haiti to study salinity as a major reason for *Jatropha* failure in the Cul de Sac Valley. Dr. Kome conducted water quality and erosion control studies in collaboration with NRCS1, LADEQ2, and the Bayou Vermillion District in Lafayette Parish, Louisiana. He has also served as a Scientist at National Soil Ecology unit and World Soil Resources. Dr. Kome focuses on the systems approach to crop planning, land use sustainability, including the use of field, laboratory and modeling tools for soil and water quality assessment and improvement. Dr. Kome received a Ph.D. in Crops and Soil Science (minors in Administration of International Development and Environmental Science) from Michigan State University, a M.Sc. in Soil Science from University of Missouri-Columbia, and a B.Sc. in Agronomy and Natural Resources from University of S.W. Louisiana.

**Roy Ifill – Chief Metallurgical Engineer.** Dr. Ifill has played a key role in SETF technology development and commercialization. In process development, he has specialized in the extraction of metals from concentrates by pressure leaching at Sherritt International. As former manager of the Oil Sands Tailings Research Facility (a national research facility), he led pilot plant testing of the crossflow filtration technique to achieve solid-liquid separation in fluid fine tailings—one of the main thrusts in oil sands development. He conducted process engineering feasibility studies with AMEC Americas for the relocation of oil sands plants at Syncrude Canada Ltd. These upstream plants performed ore preparation, bitumen extraction and tailings disposal. He has published papers on uranium and leaching behavior, on electrocoagulation and on crossflow filtration. Moreover, he reviews papers submitted to the *Journal of Hazardous Materials* and *Water Resources and Industry*. Dr. Ifill received a Ph.D. in Chemical Engineering from University of Alberta, and a M.Sc. and a B.Sc. in Metallurgical Engineering from Queen's University, Kingston, ON, Canada.

**Victor Wright – Chief Geologist.** Viewing SETF's new era technology through the prism of geological sciences, Mr. Wright has strengthened its competitiveness in both clean energy and mining/metallurgy sectors. Previously he served as an exploration geologist with the Guyana Bauxite Company, during which period computer-based analysis and apparatus were integrated into operations and over one billion tons of lateritic and refractory grade probable reserve ore reserves were discovered. In the U.S. energy sector, he worked as a production geologist and production analyst in the petroleum production engineering units of Chevron USA and Stocker Resources, Inc. Mr. Wright earned an MBA from the University of Phoenix, an MSc in Business Systems Management from the University of Southern California and a BA in Geology from the University of Oregon.

**Stephen Garrett – Plant Design, Construction Planning/Costing Manager.** Mr. Garrett is a certified Project Management Professional (PMP) with over 25 years of experience in the planning and execution of complex industrial construction projects in the Caribbean, United States, Southern Africa, and China. His experience encompasses all phases of project management: feasibility and related pre-construction work, procurement, facilities construction, and final commissioning. He has overseen the construction of heavy manufacturing facilities for chemicals and industrial raw materials, of rail and marine shipping terminals, as well as specialized materials handling structures. He has worked as a contract project manager primarily with Lafarge since 2008. Previously, he functioned as Port Manager and Operations Director with Alumina Partners of Jamaica, and as Engineering Manager with Kerr McGee Chemicals, which transitioned to IMC Chemicals in Searles Lake, CA. He is skilled in contract negotiations, while observing budgetary and schedule constraints, and holds certifications in Change Management and Executive

Decision Making. Mr. Garrett received an M.Phil. in Mineral Processing Engineering from University of Leeds, an MBA – International Marketing from University of LaVerne, and a B.Sc. in Chemistry from University of Guyana.

**Aubrey Smith – Process Design and Costing Manager.** Mr. Smith has over 30 years' experience in process engineering, project engineering, and the management and procurement of major capital equipment. He possesses multi-faceted international experience in various industries. In the project management area, as Procurement Manager with Shaw Group, Inc., he worked on power plant improvement projects, for fossil fuel, nuclear and cogeneration power plants, located in the United States, Europe, Singapore, Jamaica and Guyana. In the chemical industry, he was responsible for managing the procurement of capital equipment globally for chemical process, packaging, and water treatment facilities with major firms. In the Bauxite/alumina processing areas, in addition to his responsibility for process operations, he led teams on successful new technology projects, e.g., Lurgi fluid bed calciner. He also managed mineral processing and waste handling facilities at Alcan (Jamaica) Ltd. and Guyana Mining Enterprise Ltd. His expertise includes team leadership and coordination, contract negotiation and management, and supplier relationship management. He maintains exceptional global insight and international focus on industrial trends. Mr. Smith received an MBA – Finance/Int'l Business from NY University and B.Sc. - Chemical Engineering, University of the West Indies.

**G. Merton Cumberbatch – Product Commercialization and International Marketing Manager.**

Mr. Cumberbatch is a Chemical Engineer who has many years of in-depth national and international experience as a senior technical/marketing professional. Earlier, at DuPont and its wholly-owned subsidiary: DuPont Teljin Films, he has worked in technical service, business development, market development, application development and all aspects of product commercialization. Of particular significance is his knowledge of 'The Breakthrough Process' for short-term product improvement and 'The Stage-gate Process' for long-term new product development. A patent holder for a high barrier laminate for industrial applications, he has also contributed to the commercialization of a number of products and applications. Some products he co-developed and promoted have won the AIMCAL3 Technology of the Year Award – a World Packaging Organization award – in 2001, and runner-up in the AIMCAL Technology of the Year Award in 1992. Mr. Cumberbatch received an MBA from York University, Toronto, and a B.Sc. in Chemical Engineering from University of the West Indies.

**Reginald Nugent – Renewable Energy Programs Manager.** Mr. Nugent is an Economist with over 25 years of experience in management, strategic planning, project finance, and economic analysis. He has cofounded several start-up ventures, including an Internet software start-up in the Silicon Valley, which was successfully acquired for \$50 million. He is the Founder and Chief Executive Officer of Petras Green Solutions, LLC, a Maryland limited liability company that pursues renewable energy business opportunities in the United States, Central America, the Caribbean, and West Africa. His expertise includes business plan preparation, capital-raising, and project and municipal finance. Since February 2012, he serves as Senior Advisor/Consultant to the Minister of Industry, Investment and Commerce in Jamaica, and has worked on several energy studies with private sector partners. Mr. Nugent received a M.Sc. in Economics from the London School of Economics, and a M.Sc. and a B.Sc. in Economics from University of the West Indies. In addition, he attended the Ph.D. program at Stanford University.

**Gerry St. Michel – Market Analyst and Project Operations Manager.** Mr. St. Michel has over 30 years of professional experience in the areas of management, marketing, data analysis, database management and customer service. Since joining SETF, he has assisted on a number of projects by using his expertise in administration and situation analysis. He received an MBA from University of Maryland University College in an interdisciplinary program that equipped him with a broad spectrum of skills for global business. His studies concentrated on the global ramifications of climate change, increasing population, and resource allocation.

**Brigitte Foinding – SETF Information Technology Manager.** Ms. Foinding has a solid background in information technology and IT project management. She has performed assignments in the area of Local Area Network installation with Phoenix Project, implementing LAN solutions for several clients in Baltimore. Her overseas experience includes more than seven years as Director of IT Department at Satellite Insurance Company in Douala, Cameroon. There, she was responsible for enhancing the customer management system, implementing various technical applications, and supervising the development of client invoicing software. Ms. Foinding received a M.Sc. in

Information Systems from Ecole Supérieure d'Informatique, Montreuil, France. She is a Microsoft Certified Computer Engineer (MSCE).