

***Matt Pesce, P.E.***  
***Principal Consultant***

Matt Pesce, P.E., is an energy & facilities consultant with 18 years of experience in performance measurement, equipment & system design, commissioning, and capital & strategic planning.

Mr. Pesce provides strategic and engineering consulting and decision support to federal and state agencies and private sector clients in load reduction options, energy & maintenance management, asset management projects, performance contracting. His work has included demand response program development for Con Edison and Southern California Edison; strategy development for U.S. Environmental Protection Agency's Energy Star program; High Performance School standards implementation and business process improvements for Rhode Island Department of Education; and engineering technical assistance to school districts, local and state agencies, and federal agencies developing efficiency, renewable energy, and sustainability projects. Mr. Pesce completes energy management, engineering design, commissioning, project management, and M&V for numerous clients.

Mr. Pesce is a member of USGBC, has supported USGBC working groups for new LEED standards, and is a voting member of ASHRAE Guideline 14 for "Measurement of Energy and Demand Savings."

Mr. Pesce has a Masters degree in Business Administration and a Masters in Engineering Mechanics. He is a licensed professional engineer.

## **FACILITY STRATEGIES GROUP, LLC**

Led by Matt Pesce, P.E., Facility Strategies Group (FSG) is an engineering and strategy consultancy focused on integrated energy, facilities, and maintenance planning and design. FSG offers expertise in energy studies and planning, energy engineering, project commissioning, and operational improvement. Services include:

### ***Integrated Planning for Utilities, Maintenance, and Capital Improvements***

In addition to performance contracting, FSG routinely assists housing agencies to integrate utility management into new construction, modernization, and maintenance programs. Service areas include:

- Engineering feasibility studies and analysis, including utility bill analysis, measurements & metering, allowance studies, and energy audits
- Integrated assessments of physical needs, conservation options, part standardization & inventory turnover, and work order frequencies
- Support for energy-efficient & green projects leading to EPA Energy Star, Enterprise Green Communities, Earth Built, or LEED certification

### ***Studies, Planning and Policy Analysis***

FSG also provides research, studies, planning and market assessments. Mr. Pesce has worked with numerous clients to complete studies of demand response technology options, energy efficiency technologies, policy and building code analysis, and other planning activities. Service areas include:

- Market studies, demand response, load research
- Program evaluations and technology assessments
- Regulatory and policy analysis
- Strategy development and facilitation
- Guidebook and best practice development and case studies
- Training

### ***Design, Project Commissioning and M&V***

As owner's representative, FSG assures design intent carries through from design & specification to construction, operations, and maintenance. Services include:

- Design and design phase review & feedback, including consideration of installation and code requirements, capacity relative to load, fuel switches, comfort & humidity requirements, and operation and control strategies

- Installation & start-up phase commissioning, including functional performance testing, building code reviews, assessments of construction practices and standards of care, inspections of substantial completion, and review of maintenance procedures & training manuals
- Construction project management, including bid specifications, administration, site management, and general conditions
- Performance monitoring, measurement & verification support, including review of equipment performance, monitoring reports, and performance adjustment procedures during the construction period and through repayment

### ***Building Science Research, Building Code Analysis, and Inspections***

FSG routinely inspects commercial and residential to determine needs, analyze building failures, and provide expert witness litigation support. Services include:

- Assessments of critical needs and accelerating depreciation
- Inspections of building failures, including water intrusion, chronic mold, and foundation movement, and building Code compliance
- Evaluation of building performance, such as comfort, indoor air quality, and energy usage patterns
- Building science studies and construction research, including cycle time and installed cost evaluation, trades coordination issues, technology assessments and industry acceptance

### ***Energy Performance Contracting Support***

FSG works closely with building owners and managers to plan, implement, and support performance contracting initiatives. Service offerings include:

- Independent assessment of a project's economic potential, including review of approaches that best integrate energy performance contracting into modernization & maintenance programs
- Due diligence throughout the process—ESCO selection, project development, design & construction, and project repayment
- Analysis of performance, policy, and contractual issues, including savings shortfalls, waiver requests, adjustments to performance baseline, and performance guarantees
- Assessing fit between agency capability, portfolio needs, and energy service company strengths & weaknesses

## QUALIFICATIONS OVERVIEW

### Strategy Development and Process Improvement

Facility Strategies Group assisted the Rhode Island Department of Education, U.S. Environmental Protection Agency, U.S. Department of Housing & Urban Development, and New York City create and implement comprehensive energy and sustainability strategies.

- Rhode Island Department of Education. In 2006, FSG worked with RIDE to plan and implement changes to its regulations governing new school construction. FSG facilitated meetings with key staff, completed research, and developed the proposed regulatory language. FSG integrated High Performance Schools design criteria into the funding process. The new rules were published in 2007.
- U.S. Environmental Protection Agency. In 2005, FSG developed EPA's strategy to deploy the Energy Star brand into the affordable housing market. The comprehensive strategy considered all segments of the market. FSG is currently implementing the strategy by working with federal and state agencies, developers, and housing owners.
- U.S. Department of Housing & Urban Development. In 2006, FSG assisted HUD to develop an integrated strategy in response to the 2005 Energy Policy Act. The strategy was developed to reduce utility expenses through cost effective energy conservation and efficiency measures and energy efficient design and construction of public and assisted housing.
- City of New York. Having started in 2007, FSG is currently working with a Department within the city of New York to develop comprehensive energy and sustainability strategy to meet the city's Plan NYC 2030 goals. The approach includes green collar job creation, self-developed energy financing (without the use of energy services firms), and integration of sustainability into modernization, maintenance, operations, and procurement.
- LINC Housing. In 2008-09, FSG has supported LINC to develop and implement an energy & sustainability planning process. FSG has benchmarked LINC performance and management practices in an assessment of 4 of LINC's 30 properties, is currently developing an implementation plan and integrating results into the agency's design standards, maintenance procedures, procurement practices, and modernization plans.
- South Carolina Energy Office. In 2008-09, FSG worked with the SC Energy Office to develop curriculum for state, local government, and schools on Energy and Sustainability Strategic Planning in response to state statutory requirements. FSG is developing a course and supporting materials.

## **Training, White Paper, and Guidebook Development**

Facility Strategies Group has developed training and workshop sessions for numerous clients and recent events. These sessions were developed and delivered by Mr. Matt Pesce, P.E., who will be the lead trainer and project manager for the proposed project:

### ***National Association of Housing & Redevelopment Officials***

- ✓ 2006 and 2007, FSG created a 1-day and 2-day course on Energy Performance Contracting
- ✓ 2008, FSG provided a 1-hour internet-delivered training on performance contracting and has scheduled to make web-based presentations on green building and energy management
- ✓ 2008, FSG delivered a 2-day session on performance contracting in New York City

### ***U.S. Environmental Protection Agency, Energy Star Program***

- ✓ 2007, FSG developed 1-1/2 hour training materials regarding EPA's Energy Star programs for events sponsored by state and local agencies
- ✓ 2007, FSG made presentations to utility efficiency program sponsors regarding

### ***Rhode Island Department of Education / Rhode Island Energy Office***

- ✓ 2006, FSG developed 2-hour training presentations on green building and commissioning for RI school districts
- ✓ 2006, FSG made a 1-hour presentation to School Business Administrators regarding changes to the school construction aide program, green building, and its benefits to school districts

### ***U.S. Department of Housing & Urban Development***

- ✓ 2008, FSG developed 1-hour sessions on performance contracting for delivery to its field office staff and local stakeholders. Sessions were held in Little Rock, Boston, Atlanta, Denver, and Tallahassee

### ***SC Department of HUD, SC Energy Office, and SC Housing Finance Agency***

- ✓ 2008, FSG developed and delivered topics on energy finance and measurement & verification at a workshop targeting state housing finance agencies

FSG has also written white papers, articles, and guidebooks to support EPA, HUD, and other clients. Reports have included white papers on alternate certification pathways for

the EPA Energy Star program and a number of white papers and guidebooks for energy audits, utility allowances, and energy performance contracting.

### **Design and Project Management**

FSG provides engineering specification and design of equipment necessary to achieve the energy savings. Design and specification documents are developed and made available to solicit trades contractors for pricing and are used to establish commissioning plans and related trades inspections. Design work for mechanical systems, for example, will include equipment sizing information, functional requirements, and efficiencies.

During construction, FSG routinely supports project management and construction management to ensure project success. We support the owner to handle day-to-day construction management, procurement, and general site conditions, including such tasks change-orders, contract conditions, certified payrolls, bonding, and insurance. FSG assists the agency to acquire project financing and coordinate and manage construction, as required, to successfully implement the project within necessary financing term. Support includes working with the owner's staff to develop and issue bid packages, coordinating trade site inspections and access, and review of invoices at partial and substantial completion. FSG also coordinate with and provide support documentation to agency finance staff on budget submissions.

### **Commissioning**

To commission a project, FSG develops a commissioning plan to develop the procedures for review and inspection of representative spaces and equipment that will be constructed or rehabilitated. FSG assists the owner to establish design intent and comfort conditions for all systems and equipment that will be installed or replaced, and reviews the design specifications and drawings against building codes and industry design guides, and inspect representative buildings and spaces to the plan. FSG inspects equipment as-installed against specifications and normal industry practice. FSG completes monthly progress reports, reviews invoices, change orders, and assists with contract and performance resolution.

### **Measurement & Verification**

Facility Strategies Group will complete a measurement & verification (M&V) plan and complete annual measurement & verification of savings under the project. Methods used will defined in Department of Energy's International Performance Measurement and Verification Protocols (IPMVP) (<http://www.ipmvp.org/>), and ASHRAE Guideline 14 "Measurement of Energy and Demand Savings," (<http://www.ashrae.org>). FSG is a voting member of ASHRAE 14.

Measurement & verification involves use of engineering calculations, measurements, utility bill analysis, and statistical methods to verify actual usage against baseline

performance. Where adjustments are required to make reasonable comparisons, they will be clearly defined. FSG will

### **Sustainability and Renewable Technologies**

FSG also routinely provides engineering analysis, design, building Code and plan reviews, investment grade energy audits, commissioning, measurement & verification, and inspection services for commercial and residential buildings. We have completed analysis and support for numerous energy and sustainability projects, including use of ground source heat pumps, solar photovoltaic and solar thermal technologies, cogeneration, and condensing boilers and hot water systems. We routinely utilize industry certifications and metrics such as LEED and Energy Star.

### **Energy Performance Contracting**

Facility Strategies Group is a leader in providing decision support to local agencies as they utilize energy performance contracts for comprehensive property revitalization. We are working with more than a dozen local agencies to develop and implement these projects. FSG provides support in both ESCO-developed and owner-developed projects, including ESCO selection, review or development of investment grade audits, review or development of financing plans and guarantee provisions, independent commissioning and measurement & verification, policy analysis, design, engineering, and construction management support. FSG routinely seeks to maximize the depth and breadth of energy measures, reduce owner risk, and seeks to leverage innovative renewable and energy efficient design strategies.

### **Building Systems and Codes**

FSG has extensive knowledge of local building codes and construction processes and has completed numerous projects providing plan reviews, as-built construction inspections, building failure inspections, mechanical design, and commissioning. In addition, FSG has completed building research on new and alternative building systems that required extensive impact evaluation on building codes and supporting research to measure the performance of these systems. FSG has completed building research on mechanical systems, insulation, building shell (i.e., walls, roofs), and foundation systems. Most of this work has involved the measurement of energy performance, construction costs, quality assessments, and code compliance or impact.

FSG's design philosophy is to find solutions that are innovative and cost effective but based on proven systems and technology. Equipment and building systems should be designed, installed, commissioned, operated, and maintained to generate the lowest life cycle cost and greatest lifetime value. Innovative applications of proven technologies provide the most cost effective solutions over the long run and should improve unit turn around, reduce work order frequency, limit the need for specialty maintenance services, and improve resident comfort and satisfaction.

## **SAMPLE PROJECTS**

Below is a small sample of FSG projects:

### **Projects: Energy Performance Contracting Support Projects**

Varied clients, 1999 to present

FSG has reviewed numerous contracts to complete contract cost & savings review and contract terms & conditions. FSG has also provided construction commissioning and measurement & verification, using ASHRAE and IPMVP protocols using Options A, B, and C. Projects have included:

- City of Wilmington Government (DE), \$15M invested in lighting controls, electric commodity purchasing, and pump/motor replacements
- County of Spartanburg Government (SC), \$3M invested, lighting, controls, water, HVAC
- City of Wilmington Housing Authority (DE) ), \$6M invested, lighting, water, boilers, windows, controls
- City of Charleston Housing Authority (SC) ), \$5M invested, water, infrastructure
- City of Denver Housing Authority (CO) , \$15M invested, lighting, water, furnaces, controls
- City of New York Housing Authority (NY), \$1M invested, lighting, water, boilers, hot water, controls
- U.S. Army at Forts Belvoir, Meade, and A.P. Hill (VA) ), \$62M invested, lighting, water, boilers, chillers, central plants, controls

FSG's role in the project includes:

- Project planning and policy review
- Site inspection and opportunity assessment
- Review of the investment grade audit
- Review of hard and soft costs and negotiations
- Financial review of cash flow, incentives, and financial strategies
- Review of energy service agreement terms & conditions and negotiations
- Construction period commissioning
- Independent measurement & verification (M&V) support

### **Project Name: County Government Building Audits**

Montgomery County Maryland / EMG

April 2009 to July 2009

FSG is starting audits in the first of three phases to assess the County's 160 offices, recreational centers, correctional facilities, warehouses, and senior centers. Audits will consider packaged cooling and central chillers, boilers and heating systems, various fan

and air handler configurations, envelope measures, and controls. FSG will also assess the sites for solar system “readiness.”

FSG’s role in the project includes:

- Analysis and modeling; reports

The project is underway.

**Project Name: School Audits**

Orangeburg Schools (SC) / Calpine  
April 2009 to June 2009

FSG is starting an audit for Orangeburg County Schools. The assessment will consider energy, water, and sustainability options for the County’s 150,000 square foot high school. Heating, cooling, controls, and envelope systems will be assessed. FSG will also assess the opportunities for solar PV, solar thermal and geothermal heat pumps.

FSG’s role in the project includes:

- Analysis and modeling; reports

The project is underway.

**Project Name: Energy Strategic Planning Workshops**

South Carolina Energy Office  
November 2008 to February 2009

FSG developed training materials on energy strategic planning in response to House bill 4677 and provided four training sessions to state & local government and school districts. FSG created all material and delivered the subject matter for the 1-day sessions.

FSG’s role in the project includes:

- Content development
- Subject matter expertise and content delivery

The project is complete.

**Project Name: Commercial Building Audits**

Exelon Energy / Lockheed Martin Energy Services  
May 2008 to August 2008

FSG completed audits and analysis of numerous office buildings incorporating packaged cooling, central chillers, and various fan and air handler configurations. Work included computing demand and consumption savings for lighting, motors, chillers, boilers, and related energy systems.

FSG's role in the project includes:

- Analysis and modeling; reports

The project is complete.

### **Project Name: Rhode Island Department of Education HPS Regulations**

Rhode Island Department of Education / Northeast Energy Efficiency Partnerships, Inc.  
July 2006 to February 2007

FSG has worked with Northeast Energy Efficiency Partnerships, Inc. (NEEP) and the Rhode Island Department of Education (RIDE) to complete an overhaul of the RIDE's school construction regulations and business processes to enable RIDE to adopt High Performance Schools protocols and to better integrate improved management processes into its school funding process. RIDE funds \$61M in projects annually for new construction and modernization. Issues addressed included construction standards, school siting, asset protection, maintenance management, cost and square footage criteria, and energy management and benchmarking. FSG has completed research into protocols and best practices employed in other state education departments using tools such as staff interviews, information surveys, and reviews of regulations, construction standards, and protocols. Working with RIDE, FSG facilitated meeting and developed strategies for improved school construction processes, including high performance school design. FSG completed a position paper that reviewed current construction standards best practices and worked with RIDE to develop improved protocols for square footage standards, cost management, funding approvals, and high performance school construction.

FSG's role in the project includes:

- Strategy development and process improvement
- Policy and regulatory analysis
- Facilitation
- Technical standards review and development

The project is complete.

**Project Name: Energy/Sustainability Projects**

Strategic Energy Innovations / Southern California Edison / Southern California Gas  
April-06 to Present

For Southern California Edison and the California Public Utilities Commission, FSG is developing innovative financing strategies, including performance contracting, for energy efficiency in public and assisted housing. The program seeks to aggregate small and medium size owners that receive funding through programs such as public housing, Housing Choice Voucher, Section 8, Section 202, and tax credits. FSG provides the engineering and financial strategies and analysis, which includes review of contract documents, audit documents, and projected savings. FSG performs energy audits, utility bill analysis, and allowance studies, and completes measurement & verification of savings, including regression techniques to compare pre- and post-retrofit performance, construction inspections, and commissioning.

Southern California Gas (SCG). FSG is working with LINC Housing to analyze a sample of properties and develop a comprehensive sustainability plan for their asset management organization. FSG is evaluating green, renewable, and energy efficient technologies such as solar thermal and xeriscaping and is developing processes for green procurement, property siting / acquisition, rehabilitation, maintenance, and operations. FSG is also working with HUD's PAE Ontra on its Multifamily Green Initiative to develop a best practice guide for Green Property Condition Assessments. FSG will evaluate a recently completed PCA report and develop sample guidelines for contractors.

FSG's role in the project includes:

- EPC project planning
- Aggregation of small and medium sized local agencies
- Site inspection and opportunity assessment
- Sustainability studies and analysis
- Review of the investment grade audit
- Review of hard and soft costs and negotiations
- Financial review of cash flow, incentives, and financial strategies
- Review of energy service agreement terms & conditions and negotiations
- Construction period commissioning
- Independent measurement & verification support

The project is active.

**Project Name: ENERGY STAR**

Institute for Building Technology and Safety / U.S. Environmental Protection Agency

July-05 to Present

For U.S. Environmental Protection Agency's Energy Star program, Facility Strategies Group evaluated the affordable housing market and assisted EPA staff to develop strategies and deploy their successful Energy Star brand into appropriate target segments. FSG has completed strategy development, policy analysis, research and case studies, training, and engineering analysis. FSG is working with a number of local and state government agencies to promote greater efficiency in tax credit, bond, HOME, and other state administer housing programs.

FSG completes cost-benefit analysis of qualification allocation plan targeting criteria, evaluates efficient and green building strategies for rehabilitation and new construction, and assists HFAs and others to develop programmatic solutions for various building types and sizes, including mid- and high-rise multifamily and historic preservation projects.

FSG's role in the project includes:

- Energy program evaluation and strategy development
- Energy Star and LEED/Earth Craft/Green Communities program analysis
- Energy efficiency and cost-benefit analysis
- Policy, financial, and engineering support

The project is active.

University of California, San Diego  
**B.A., Political Science (*Cum Laude*), 1995**

**Synergistic Activities**

- Over ten years, working with government agencies on policy and programs
- Visionary and architect of the PACE program while working at the City of Berkeley
- Educating and training various local agencies on PACE programs at over 100 engagements and conferences over the past year including US EPA, HUD, and DOE
- Helped lead the national PACE NOW coalition of cities and counties working on PACE programs, including as the chair of the best practices working group
- Served as a key participant in the "Retrofit Roadshow" program convened in several cities by the Clean Economy Network, Sierra Club, LIUNA and the U.S Department of Energy.

## Mimi Frusha, COO

### EXPERIENCE

2008 – Present, **Renewable Funding, Chief Operating Officer** Oakland, CA

*Firm providing turn-key financing solutions to local municipalities to promote clean energy improvements in commercial and residential buildings*

- Original member of firm responsible for day-to-day operations of the firm including financial analysis and reporting, capital formation, technology, marketing, contract management, and program implementation

2006 – 2008, **Inner City Advisors, Program Manager** Oakland, CA

*Pro-bono business consulting organization designed to serve local, high-growth companies committed to social and environmental responsibility*

- Managed relationships with 20 portfolio companies and over 75 professional advisors, including recruiting companies and advisors, assessing needs, matching companies with advisors, and reporting on activities
- Developed and implement new program products and services, such as educational forums and strategy sessions, to facilitate financial and operational performance of portfolio companies
- Managed communication and create marketing collateral circulated stakeholder base

2004 – 2008, **The Assets Alliance, Consultant** National

*National organization of consultants dedicated to expanding the capacity of financial services and asset building programs for low-income families and individuals*

- Worked on various consulting projects that involve providing technical support services, delivering trainings on effective program design, developing educational materials, and evaluating program's impact. Clients include U.S. Office of Community Service, Jim Casey Youth Opportunities Initiative, Assets for Independence Act, CFED, and New York City ACS

2004 – 2005, **Juma Ventures, Asset Services Manager** San Francisco, CA

*Social enterprise providing jobs along with financial, health, and education services to Bay Area youth*

- Managed Asset Services department consisting of three programs providing financial education, first bank accounts, and matched savings accounts to over 500 low-income youth
- Administered approximately \$150,000 in participant savings and \$400,00 in matching funds, requiring regular analysis of disbursed and available matching funds

2000 – 2003, **East Bay Asian Local Development Corporation, Program Coordinator** Oakland, CA

*Community Development Corporation that develops affordable housing and community facilities with integrated services*

- Implemented and managed a new program delivering financial education and a matched savings program to help youth learn financial basics and save for future goals
- Coordinated six adult Individual Development Account programs to help families and individuals build assets

### EDUCATION

**University of California at Berkeley**, Walter A. Haas School of Business  
*Master of Business Administration*, Expected Graduation Date: May 2010

**Carleton College**, *B.A., Latin American Studies (Cum Laude)*, June 2000  
Center for Global Education, Central America & School for International Training, Bolivia, Fall 1999

### Synergistic Activities

- 10+ years experience developing & implementing finance programs for various communities and target audiences
- 10+ years managing the needs of various stakeholders coming from non-profit, business and public setting
- Experience leading the design and implementation of PACE programs including Berkeley, Boulder, San Francisco, and Sand Diego
- Served as a key participant in the "Retrofit Roadshow" program convened in several cities by the Clean Economy Network, Sierra Club, LIUNA and the U.S Department of Energy.

## JOANNA KARGER, CFO

### EXPERIENCE

2009-Present     **Renewable Funding**, Oakland California

**CFO:** Responsible for risk management and financial health for company and the PACE programs that it supports

2003-2008     **McMORGAN & CO**, San Francisco, California  
Investment Management firm managing over \$12 billion in assets

**Senior Vice President:** Head of Fixed Income and member of the Executive Committee with dual responsibility for generating top quartile investment performance and developing/managing the fixed income business, which contributed over 75% of the revenue for McMorgan.

- Developed and managed Fixed Income investment strategy, process and risk management. Actively managed fixed income assets totaling approximately \$8 billion, including retail mutual funds.
- Achieved consistent top quartile 5-year performance; generated competitive risk adjusted returns versus benchmarks (Callan universe).
- Developed and gained approval of a 5-year strategic business plan including new product development and significant new investment in talent and technology (Blackrock Solutions).
- Lead portfolio manager for all structured/securitized products including residential and commercial mortgages, asset backed securities and floating rate notes.
- Communicated investment strategy and performance to clients, client relationship officers, and consultant community.
- Responsible for Fixed Income business development and strategy; managed department budget.
- Rebuilt and managed a growing team of investment professionals.

1994- 2002     **DRESDNERRCM GLOBAL INVESTORS**, San Francisco, California  
Investment management firm managing over \$20 billion in assets

**Director:** Managed all mortgage related portfolios and products and was a member of the Investment Policy Committee responsible for asset allocation.

- Managed \$4-5 billion in mortgage portfolios. Determined asset allocation within the mortgage sector including pass-through securities, whole loans, collateralized mortgage obligations (CMOs), commercial mortgage backed securities, asset backed securities and floating rate notes.
- Achieved superior performance for mortgage only mandates. Performance was more than double client objectives over the last 5 fiscal years.
- Contributed superior and consistently positive excess returns to broad market mandates from mortgage-related investment strategies.
- Developed a proprietary investment process for securities with embedded options.
- Managed \$100 to \$200 million in mortgage securities for leveraged, closed-end income fund. Consistently successful in structuring portfolio to meet income target despite significant negative convexity.

- Developed a proprietary fixed income trading system.
- Managed staff.

1993-1994 **SUTRO & CO.**, San Francisco, California  
*Associate, Public Finance*

Structured and executed municipal bond transactions.

1987-1991 **US TREASURY, OFFICE OF THRIFT SUPERVISION**, San Francisco, California  
*Senior Examiner*

Lead team member responsible for examining the safety and soundness of the largest most sophisticated savings and loans in the Western U.S.

### EDUCATION

**The Wharton School, University of Pennsylvania**, Philadelphia, Pennsylvania  
Masters of Business Administration, Finance

**The University of California at Berkeley**, Berkeley, California  
Bachelor of Arts, Economics; Significant coursework completed in Rhetoric

### Synergistic Activities

- 15+ years of institutional investment experience
- 15+ years of investing in PACE like bonds/financings
- Deep understanding of how institutional investors evaluate and manage the risk of PACE like bond investments
- 4+ years of experience in assessing residential real estate credit, including underwriting standards and workout procedures

## **Robert L. Pratt**

Rob Pratt is the founder, Chairman and CEO of EnergyClimate Solutions (ECS), a company dedicated to helping colleges and universities become climate leaders while reducing energy, water and infrastructure costs. ECS assists colleges and universities become climate leaders, significantly reducing greenhouse gas emissions through the implementation of energy and water efficiency projects, cogeneration and renewable energy installations, and student-led behavioral programs.

Mr. Pratt was formerly the founder, Chairman and CEO of Energia Global International (EGI), a company that became one of the leading renewable energy companies in Central America. From a startup in 1991, EGI became the largest private power company in Costa Rica, with substantial power and distribution assets in Guatemala, El Salvador and Chile. Energia Global developed, financed and owned high and medium head hydroelectric projects and developed and financed what was at the time Latin America's largest wind farm in Costa Rica in 1998-1999. In addition, EGI co-owned with the AES Corporation the CLESA electricity distribution company in El Salvador. Mr. Pratt laid out the company's vision, built the EGI team, attracted prestigious U.S. and Central American partners and investors, and raised \$60 million in equity financing from 1991 through 2001, growing the company to annual revenue of \$40 million in electricity sales and assets of over \$240 million. Energia Global was acquired by Enel S.p.A., the largest electricity company in Italy, in a \$100 million transaction which was completed in June 2001. EGI, now known as Enel Latin America, is the largest renewable energy development company in Central America.

Mr. Pratt is Chairman Emeritus and a member of the advisory board of the American Council On Renewable Energy (ACORE). He serves as Chairman of the board of the International Institute for Energy Conservation (IIEC), promoting energy efficiency policies and their implementation in developing countries, a non-profit organization that he founded in 1984. Rob is Treasurer, a member of the Executive Committee and on the board of the Alliance to Save Energy (ASE), the largest non-profit organization in the U.S. solely dedicated to the promotion and acceleration of energy efficiency. He is President and a member of the board of the Cambridge Energy Alliance, and is on the Executive Committee and a member of the board of the New England Clean Energy Council (NECEC).

After the EGI/Enel transaction, Rob was appointed to be the Director of the Massachusetts Renewable Energy Trust (RET), the \$250 million fund that was created to stimulate the supply of and demand for green power as part of the state's landmark law deregulating the electric utility industry in 1997. Under his leadership, the Renewable Energy Trust developed a series of innovative programs designed to promote the use of clean energy technologies. These included a nationally acclaimed \$70 million program for large-scale renewable facilities, making available long term contracts for Renewable Energy Certificates (RECs) under the state's Renewable Portfolio Standard; a \$15-20

million investment fund for purposes of investing in Massachusetts' clean energy companies; a \$10+ million community wind initiative to assist the state's cities and towns in siting and installing wind projects in the 1-5 MW range; and a series of incentive programs which were expected to result in the installation of \$50-75 million in small and mid-size solar photovoltaic, wind and hydro installations over a 4-7 year period.

Prior to founding EnergyClimate Solutions, Rob was the Senior Vice President of the Henry P. Kendall Foundation, where he strategized and developed innovative, large-scale city energy efficiency projects such as the Cambridge Energy Alliance as well as assisted in developing efficiency programs in New York City and in the Southeast US.

Before founding Energia Global, Mr. Pratt was Chief Executive Officer of PRAXIS, Inc., a company that he co-founded in 1986. PRAXIS represented software and technology companies seeking to increase sales with the federal government. He was formerly the Director for International Trade and Government Relations for Thermo Electron Corporation, a fast growing public company, where he was involved in the international marketing of cogeneration and industrial energy conservation products. In addition, Rob headed Thermo Electron's China Trade Program, assisting five of the company's divisions in entering and doing business in the PRC where the company achieved profitable operations.

As Executive Director of the New England Congressional Caucus in the late 1970s, Mr. Pratt directed the staff and programs of the bipartisan organization that was composed of the 25 Members of the U.S. House of Representatives from New England, particularly focusing on energy issues. Working with Congressman (later Senator) Paul Tsongas and other members of the N.E. Congressional delegation, Rob led the creation of the New England Energy Congress, which resulted in a series of major legislative, regulatory and implementation victories in the late 1970s and early 1980s. Rob started his career on Capitol Hill as a Legislative Assistant to Congressman Robert Drinan, focusing on energy, environment and the economy.

Mr. Pratt received an MPA degree from the John F. Kennedy School of Government at Harvard University, a JD degree from Georgetown University Law Center, and a BA degree in government with high honors from Wesleyan University.

**Qualifications**

**Government Services  
and Program Management**

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## Overview of Reznick Group

Reznick Group is a national public accounting and business advisory firm. Founded in 1977, the firm is ranked as the 13th largest accounting and business advisory firm in the United States. Reznick and/or its principals are licensed in all 50 states and jurisdictions in which we practice with nearly 1,200 professionals and staff. We maintain offices in Atlanta, Baltimore, Charlotte, Los Angeles, Austin, Chicago, Sacramento, Bethesda, Md., and Tyson's Corner, Va.

With over 30 years of experience providing accounting, tax, and business advisory services to clients nationwide, Reznick Group continues to grow nationally, expanding our services, and building upon our leadership as industry experts. Now, more than ever, it is our affirmation to provide our clients with the experience, quality work product, and sound business advice they value. Our national reputation allows us to attract the best and brightest in the industry while our local expertise provides our clients with the specialized service they demand. Reznick Group is:

- Registered with the Public Company Accounting Oversight Board (PCAOB).
- A member of the Securities and Exchange Commission's (SEC) Practice Section and the Private Companies Practice Section of the American Institute of Certified Public Accountants (AICPA).
- A member of the AICPA Major Firms Group, which includes firms with 50 or more AICPA members (excluding the Big Four firms).
- A charter member of the International Group of Accounting Firms (IGAF).
- Named a "Best of the Best Firms" by *Inside Public Accounting* (formerly *Bowman's Accounting Report*) in its "Top 25 Best Firms" for the years 2004, 2005 and 2007.
- Member of the AICPA, Governmental Audit Quality Center

## Governmental Service Team

Every day, finance and accounting professionals working in the government sector are required to address a wide variety of audit, accounting and reporting matters. Reznick Group, through our Governmental Service Team, assists federal, state, and local governments in dealing with complex financial and management issues, compliance requirements, and other critical challenges. Our services include:

### Accounting and Financial Services

- Financial Audit and Audit Readiness
- Quality Control and Quality Assurance
- Forensic Accounting
- Internal Audit
- Contract Audits/Recovery Audits
- Operational Assessments and Cost Efficiency Audits
- ABC Reviews and Audits
- Compliance and Monitoring

### Program Services/Project Management

- Full Life Cycle Program Development and Implementation
- Needs Assessments
- Federal and State Government Policy Group
- Grant and Loan Program Administration
- Compliance and Monitoring
- Fraud, Waste, and Abuse Control
- System Implementation

Our Governmental Service Team has significant knowledge of federal accounting standards, federal financial improvement regulations, economic stimulus reporting requirements, information systems auditing standards, and state and local regulations. We employ a proven project management approach that provides clients with a repeatable and reliable process. This helps them achieve their business goals and facilitate communication, scheduling, staffing, administration, compliance, and reporting.

Reznick Group is a national leader among full-service certified public accounting and business advisory firms specializing in providing accounting, audit, and consulting services to government agencies and entities in the private sector. Reznick Group has provided audit services to local and state governments and governmental entities consistently for the past 18 years, especially those entities requiring a single audit in accordance with OMB Circular A-133. We have helped our clients to prepare financial statements that are meaningful to the general public and have served as consultants with respect to internal controls and special projects.

Through our work with many governmental entities, we have extensive experience with the many major federal programs including:

- U.S. Department of Homeland Security
- U.S. Environmental Protection Agency
- U.S. Department of Transportation
- U.S. Department of Housing and Urban Development
- U.S. Department of Energy

### **OMB Circular A-133 Compliance**

Reznick Group has extensive experience conducting audits in accordance with the standards for financial audits contained in Government Auditing Standards (the Yellow Book) issued by the Comptroller General of the United States, the requirements of the Single Audit Act Amendments of 1996 (Single Audit Act) and the provisions of U.S. Office of Management and Budget Circular A-133 (OMB A-133). Currently Reznick Group performs over **1,500 audits** annually in accordance with Government Auditing Standards. As such, we routinely participate in Quality Assurance Reviews (QARs) from government oversight agencies, as well as internal and external SEC practice peer reviews. In order to audit government grants, cooperatives and contracts, the auditor must possess the combined knowledge of all applicable sections of the Code of Federal Regulations, Federal Acquisition Regulations, OMB Circulars and Bulletins, Government Auditing Standards and GAAS in the United States. Reznick Group performs tests of controls to evaluate the operation of internal control policies and procedures relevant to the prevention and detection of material noncompliance with specific program requirements, general program requirements and requirements governing claims for advances and reimbursements and amounts claimed under direct and/or indirect federal awards. Our audits are relied upon as an independent assessment of the performance of an organization's program or activity functions, contributing to the government's evaluation and assessment of public accountability, as well as to facilitate corrective action, if necessary.

## Selected Experience Summaries

### Department of Energy

Reznick Group has been actively engaged with the educating the Department of Energy on the monetization of tax benefits and various tax structuring. Specifically, Reznick Group has helped identify what incentives are available, how to maximize their value and how to circumvent issues raised when tax-exempt or governmental entities are involved. Reznick Group also drafted a fact sheet which describes how tax-exempt entities can indirectly benefit from the energy investment tax credit for the installation of fuel cell systems. As a result, Reznick Group also was involved in the drafting of the guidance on the Section 1603 grant program that currently is referenced on the DOE's web site.

### Mississippi Development Authority (MDA) Disaster Recovery Programs

Reznick Group was prime contractor for multiple Mississippi Development Authority (MDA) Disaster Recovery programs following Hurricane Katrina. We provided program management and oversight for the distribution of federal block grant disaster recovery funds for the MDA Homeowner Assistance Program, Small Rental Assistance Program, and the Mississippi Elevation Grant Program. Reznick developed procedures and protocols to evaluate and process applications and award grant funds, implemented grants management systems, established application intake centers, hired and trained more than 300 local Mississippians, ensured compliance with federal and state regulations and provided a means to track and monitor the program and prevent fraud, waste and abuse. Reznick was directly involved in the distribution of more than \$2.5 billion under this program. The programs' structure, personnel and process were multi-focused, having oversight and responsibility for the seamless integration of HUD, FEMA, SBA, and state policy requirements.

### State of Texas

Reznick Group is currently engaged as a subcontractor in two Federal disaster recovery grant programs that are a key part of the State of Texas' efforts to rebuild in the aftermath of hurricanes Katrina, Wilma, and Rita. The purpose of these programs is to distribute approximately \$200 million in U.S. Department of Housing and Urban Development (HUD) CDBG funds to Texas homeowners in grants or deferred forgivable loans to rehabilitate, reconstruct, or replace their homes. These programs are executed under the auspices of the Texas Department of Housing and Community Affairs' (TDHCA) Homeowner's Assistance Program (HAP) and Sabine Pass Restoration Program (SPRP).

The scope of work for the Texas HAP and SPRP administration includes the people, processes and tools to support determining and validating homeowner eligibility, calculation of HAP / SPRP benefit amounts, and management of the disbursement of Funds. Our experience on this project involves complex, large-scale program operations. Through our performance of disaster recovery programs, Reznick has developed extensive knowledge of the stakeholders involved in homeowner assistance processes on the Gulf Coast. Communication with stakeholders has included:

- TDHCA - Development of final policies and procedures, status reporting, issues, and support of TDHCA in communications with HUD and the media

- Citizens of Texas – to keep applicants apprised of the program and its progress
- Local organizations including the Councils of Government and faith based organizations, insurance companies, FEMA, HUD, National Flood Insurance Program, Small Business Administration, and other Texas stakeholders

#### **State of Louisiana, Road Home Transition Team**

In the fall of 2008, the State of Louisiana chose Reznick Group to provide staff augmentation consulting services in support of the Road Home Transition Team. The Transition Team was responsible for transitioning the work performed by the Previous Primary Road Home Contractor to a new Primary Contractor. The firm's responsibilities under the State of Louisiana's Transition Team Contract included the following:

- Transition Requirements and Planning
- Development/Processing/Evaluation of Business Operations Procurement Request for Proposals (RFP's)
- Project Management and Transition Administration
- Road Home Long Term Monitoring Plans
- Other OCD/DRU Programs Monitoring Plans

#### **Key Engagement Team**

##### **Edward E. Lusk, Jr., CPA, CVA – Principal**

Edward Lusk is an Audit Principal in the firm's Atlanta Office with over 15 years of public accounting experience. His professional experience includes extensive audit, accounting and litigation services. Mr. Lusk's areas of industry expertise include real estate, healthcare, construction, professional service firms, mortgage bankers and brokers, benefit plans, government, and non-profit. The clients he services range from small, closely-held businesses to publicly-traded, global conglomerates. Mr. Lusk also assists clients in reorganizing their accounting systems and internal reporting functions, as well as assisting clients in internal control systems analysis, design and implementation.

Concentrating in the real estate arena, Mr. Lusk provides services to developers and owners of affordable housing, multifamily and commercial real estate, syndicators, investors and property management companies. His services include property and fund level audits, cost certifications, net operating income and debt service analysis, cash flow analysis, CAM charge reviews, Section 42 compliance reviews and consulting. Mr. Lusk also assists his clients in locating, negotiating and acquiring interests in low-income housing tax credit projects. Mr. Lusk is a frequent speaker on various low-income housing tax credit topics and provides his clients with one-on-one educational workshops.

- **Education**  
Bachelor of Science, University of Alabama
- **Licenses**  
CPA, State of Georgia  
CPA, State of Missouri

CPA, State of Washington  
 CPA, State of Florida  
 Certified Valuation Analyst

■ **Professional Affiliations**

Member, American Institute of Certified Public Accountants  
 Member, Georgia Society of Certified Public Accountants  
 Member, Florida Institute of Certified Public Accountants  
 Member, National Association of Certified Valuation Analysts  
 Member, University of Alabama School of Accounting Advisory Board

**Michael Hammond, CPA – Principal**

Michael is a Principal in the Atlanta office of Reznick Group. Mr. Hammond has over 25 years of business experience in both the public and private sectors. His experience includes 18 years with international accounting firms. He is experienced in financial, operational and performance audits, and process improvement. Michael has spent a significant part of his professional career advising a variety of companies on risk and controls. He is involved in the delivery of business risk assessments and internal audit sourcing engagements for internal audit service delivery. Michael is Reznick Group's Atlanta market internal controls subject matter professional. Mr. Hammond was lead engagement senior manager on the following financial statement audits:

- State of Florida Department of Lottery
- Miami-Dade County, Florida\*
- Broward County, Florida\*
- Lee County, Florida\*
- School Board of Broward County, Florida\*
- City of Coral Springs, Florida\*
- City of Hallandale, Florida\*
- City of North Miami, Florida\*
- City of Pembroke Pines, Florida\*
- Town of Davie, Florida\*
- City of Florida City, Florida\*
- City of North Bay Village, Florida
- Broward Employment and Training Administration

Mr. Hammond served as a project advisor to a national consulting firm on a SAP implementation for the Commonwealth of Pennsylvania. Mr. Hammond served as engagement senior manager to assist the State of South Carolina, Commonwealth of Puerto Rico and School Board of Palm Beach County on the implementation of GASB 34. Mr. Hammond assisted Lee County, Florida in its early adoption of GASB 34. Mr. Hammond conducted an activity based costing project for the City of Coral Springs' parks department.

■ **Education**

B.A. University of South Florida

■ **Licenses**

CPA – Georgia

**Daniel R. Worrall, CPA – Engagement Senior Manager**

Daniel R. Worrall is a Senior Manager in the Audit and Accounting Department of the Reznick Atlanta office. He has over nine years of public accounting experience encompassing audit, accounting, tax, cost certification and other relevant accounting services as well as over a year of experience as a corporate accountant. Mr. Worrall has provided accounting services for a

variety of clients in the real estate industry as well as real estate clients in the non-profit sector. These services range from financial statement audits, tax return preparation, and the evaluation of internal controls to keeping clients updated on government required standards, and various agreed upon procedures engagements. Mr. Worrall has also been involved in consulting services related to establishing corporate accounting structures and due diligence services related to the sale of companies.

Mr. Worrall's responsibilities at Reznick include planning and performing audit, tax, compliance testing and agreed upon procedures engagements. He is responsible for providing audit, tax and consulting services to multiple real estate clients, some of which have received federally sourced funds. He is also responsible for providing audit services to various public housing authorities and development authorities. Mr. Worrall is also responsible for working effectively with audit associates in the areas of training, supervising, and reviewing their work. Throughout these engagements, he has shown effective communication with the clients in order to not only carry out his duties, but also to provide suggestions on how to improve client operations. Mr. Worrall's responsibilities at Reznick also include assisting in managing an audit team of about seventy team members. He is responsible in providing evaluations and mentoring to the staff members who work directly and indirectly with him as well as managing the overall productivity of his team.

- **Education**  
Bachelors in Business Administration – University of Western Michigan
- **Licenses**  
CPA, State of Georgia  
CPA, State of Michigan
- **Organizations**  
Member, American Institute of Certified Public Accountants  
Member, Michigan Association of Certified Public Accountants  
Member, Georgia Society of Certified Public Accountants

<p><b>Atlanta, Georgia</b> 2002 Summit Boulevard Suite 1000 Atlanta, GA 30319  Tel 404.847.9447 Fax 404.847.9495</p>	<p><b>Austin, Texas</b> 100 Congress Avenue Suite 300 Austin, TX 78701  Tel 512.494.9100 Fax 512.494.9101</p>	<p><b>Baltimore, Maryland</b> 500 E Pratt Street Suite 200 Baltimore, MD 21202  Tel 410.783.4900 Fax 410.727.0460</p>
<p><b>Bethesda, Maryland</b> 7700 Old Georgetown Road Suite 400 Bethesda, MD 20814  Tel 301.652.9100 Fax 301.652.1848</p>	<p><b>Charlotte, North Carolina</b> 309 E Morehead Street Suite 100 Charlotte, NC 28202  Tel 704.332.9100 Fax 704.332.6444</p>	<p><b>Chicago, Illinois</b> 4711 W Golf Road Suite 200 Skokie, IL 60076  Tel 847.324.7500 Fax 847.324.7501</p>
<p><b>Los Angeles, California</b> 1888 Century Park East Suite 1625 Los Angeles, CA 90067  Tel 310.843.9700 Fax 310.843.9797</p>	<p><b>Sacramento, California</b> 400 Capitol Mall Suite 900 Sacramento, CA 95814  Tel 916.442.9100 Fax 916.442.9103</p>	<p><b>Tysons Corner, Virginia</b> 8045 Leesburg Pike Suite 240 Vienna, VA 2282  Tel 703.744.6700 Fax 703.744.6701</p>

**Education**

M.E.M., Environmental Management, Duke University, 1983.

B.S., Zoology, University of North Carolina at Chapel Hill, 1981.

**Professional Experience:**

Environmental Planner, 2007 to date. Town of Carrboro, NC

As Carrboro's Environmental Planner, Mr. Dodd works with Town staff on a wide range of environmental and sustainability initiatives; provides staff assistance to the Environmental Advisory Board and Greenways Commission; reviews development plans for consistency with environmental regulations and policies; researches, recommends, and reviews land use ordinance and Town code provisions related to environmental programs; administers Town compliance for State NPDES stormwater permit; coordinates Town involvement with Bolin Creek Watershed Restoration Team;; coordinates public outreach efforts for Town environmental programs; represents town in other local and regional efforts to expand and improve environmental protection including greenhouse gas reduction, tree protection, air quality protection, water supply protection, water conservation; undertakes special studies on environmental conditions including energy conservation, forest cover, air and water quality, greenway and open space needs, waste management and recycling, floodway and floodplain management, and regulatory and management strategies. Specific energy related initiatives that Mr. Dodd has been involved in include arranging for an energy audit of the Town's buildings; coordinating the Town's EECBG proposal; developing a community survey and outreach materials to help direct local climate protection efforts; recommending development project enhancements to support energy efficiency and climate protection; and working with Duke Energy on a solar lighting demonstration project.

Research Environmental Scientist, 1989 to 2007. Research Triangle Institute, Research Triangle Park, NC.

Mr. Dodd supported a broad array of programs and initiatives related to watershed, stormwater, and water quality management, water quality database development, surface water and wetlands monitoring and assessment, modeling, information transfer, and technical guidance. His worked has ranged from small watershed to national in scale. He completed over a dozen major projects in North Carolina, and, under contract to EPA, has supported many other State water quality programs as well as national water quality assessment projects.

Environmental Supervisor/Modeler/Engineer, 1983 to 1989. North Carolina Division of Environmental Management, Raleigh, NC.

Mr. Dodd supervised and prepared wasteload allocations and surface water quality assessments for streams, lakes, estuaries, and watersheds in North Carolina. He calibrated, verified, and applied various water quality models and used results to support the development of water-

## **RANDALL C. DODD**

301 W. Main Street, Carrboro, NC 27510

(919) 918-7326 rdodd@townofcarrboro.org

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quality-based permits. He provided technical support for basinwide phosphorus and nitrogen management strategies. He designed and participated in intensive field surveys to support modeling and assessment activities. He evaluated innovative wastewater management technologies, including natural and constructed wetlands discharge and treatment, hydrograph controlled release, and biological nutrient removal for municipal wastewater.

### **Areas of Technical Expertise:**

Mr. Dodd has experience in: watershed, water quality and stormwater management; environmental and urban planning; sustainability; greenways; Geographic Information Systems.

### **Other Information**

Mr. Dodd's home generates electricity for NC Green Power, and also includes passive solar, solar thermal, energy efficiency, and rainwater harvesting features. Mr. Dodd received the 2008 NC Mobile Care Special Citizen Award in recognition of his personal commitment to alternative fuel and alternative vehicle technology.

244 Chipmunk Circle  
New Market, AL 35761

Phone: (256) 348-0906  
Email: [larry.denman@hsvutil.org](mailto:larry.denman@hsvutil.org)

## James Lawrence Denman

### Resume as related to energy information and energy program management

#### **Work experience:**

HUNTSVILLE UTILITIES 1-05 to present Community Relations Superintendent

4-97 to 1-05 Load Mgt. Supervisor

10-86 to 4-97 Electrical Engineering Services (distribution)

9-84 to 10-86 Heat Pump Energy Advisor

3-84 to 9-84 Load Management Technician (Temp)

LOWES BUILDING SUPPLY 10-82 to 2-84 Master Salesman (Building Supply Sales)

HUNTSVILLE INSULATION COMPANY 7-76 to 9-82

Part-time through 2 years of high school and 4 years of college. -- Applicator and Crew Leader working with ventilation and numerous insulation products including foam and wet cellulose.

#### **Education:**

JACKSONVILLE STATE UNIVERSITY, Jacksonville, AL 1978 to 1982

B.S. Business Administration (Major Marketing) B.S. Psychology

#### **Energy Related Certifications:**

HERS Rater Certification (Southface Energy Institute)-(Recertified at HEC, Home Energy Concepts)

Utility Marketing Certificate TVPPA

Manual – J Heat Load Calculations – TVA

TVA – Heat Pump Advisor Certification

#### **Program Management While at Huntsville Utilities:**

Huntsville Utilities New Homes Program-More than 600 energy right and Energy Star certifications each year

Huntsville Utilities Efficiency Program-More than 60 HVAC system inspections each year

Huntsville Utilities Load Management Program (Over 10,000 water heater and air conditioner devices)

TVA Energy Audit Pilot Program 2008 (347) Standard and (101) Advanced residential surveys conducted

TVA Energy Evaluation Pilot Program 2009 (445) Standard energy surveys conducted

## Ruchi Gupta Singhal

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**Objective:** To create a sustainable energy economy for Alabama using my extensive alternative energy background in technical assistance and outreach activities.

### Work Experience:

***BizTech – Business Technology Development Center Inc.,*** Huntsville, AL  
*July 2008 – present*

#### **Nexus Energy Center Director:**

- Serve as director of new outreach program to bring more business and research partnerships in all facets of energy (conservation, creation, transmission, and storage) to the Tennessee Valley
- Host seminars with presentations on technical energy information as well as business planning advice
- Create education material to distribute to entrepreneurs, colleges, chambers of commerce, and other citizens
- Promote Nexus Energy Center through new website ([www.nexusenergycenter.org](http://www.nexusenergycenter.org)) featuring several media spotlights of program efforts
- Search for funding opportunities related to energy/environmental education and renewable energy advancement
- Serve on the **Mayor's Taskforce for Sustainability Council – "Green 13"** as Energy Subteam Lead ([www.hsvcity.com/green](http://www.hsvcity.com/green)) to develop sustainable strategies for Huntsville, AL

***North Carolina State University, NC Solar Center,*** Raleigh, North Carolina  
*November 2006 – May 2008*

#### **Clean Transportation Coordinator:**

- Analyze air emissions for alternative fuel and transportation technologies
- Coordinate Clean Fuel Advanced Technology (CFAT) project tasks including grant application and selection
- Provide technical assistance on various transportation technologies to interested entities in North Carolina
- Promote new transportation endeavors in North Carolina via conferences and workshops – hosted statewide Mobilizing North Carolina Conference, Greensboro, NC (April 2007) focusing on alternative transportation topics
- Conduct education and outreach meetings in rural North Carolina townships on various topics of alternative transportation

***North Carolina Department of Environment and Natural Resources (NCDENR),  
Division of Air Quality (DAQ),*** Raleigh, North Carolina  
*March 2003 – October 2006*

#### **Environmental Engineer:**

- Review and evaluate stationary source enforcement cases for correct application of air quality requirements. Assist DAQ staff on rule interpretation, penalty assessments and compliance concerns.

- Compile and report division's compliance and enforcement statistics.
- Conduct special assignments (Special Order by Consent (SOC)) for non-compliant facilities that include formulating strategies to bring the facility into compliance and prevent reoccurrence of the problem.
- Update division's enforcement database with new case information; communicate with violators on compliance issues, and coordinate with the North Carolina Attorney General's Office on non-compliance matters.
- Serve as coordinator and member of the Open Burning Outreach Team. <http://daq.state.nc.us/enf/openburn/>
- Serve as liaison between DAQ and the Division of Pollution Prevention and Environmental Assistance, including participating in the NCDENR Internal Workgroup for the Environmental Stewardship Initiative.

**Internships:**

- **North Carolina State University**, Raleigh, NC, *August 2000–May 2003*  
Research Assistant for Advanced Battery Systems
- **Georgia Institute of Technology**, Atlanta, GA, *August 1999–May 2000*  
Undergraduate research assistant in Lithography research group
- **Proctor and Gamble Incorporated**, Cincinnati, OH, *June – August 1998*  
Summer Internship in R&D, Food and Beverage Division
- **Hercules Incorporated**, Wilmington, DE, *June – September 1997*  
Summer Internship in R&D, Paper Division
- **Hercules Incorporated**, Oxford, GA, *July – October 1996*  
Summer Internship in R&D, Fibers Division

<b>Education:</b>	North Carolina State University	2000 - 2003
	<b>M.S. Chemical Engineering - with Thesis</b>	<b>GPA – 3.5 / 4.0</b>
	• Graduate Assistance in Areas of National Need (GAANN) Fellow	
	Georgia Institute of Technology	1996 – 2000
	<b>B.S. Chemical Engineering - with High Honors</b>	<b>GPA – 3.5 / 4.0</b>
	• Dean's List all quarters	
	• University College of London	Summer 1999

**Media Features:**

Vollers, Anna Claire. "Why Not Huntsville: Could the City see an alternative energy and sustainability boom?" The Huntsville R&D Report Fall 2009: 30-37

Singhal, Ruchi. "Energy: We can't live without it." The Huntsville Times 30 May 2009

Lawson, Brian. "Got a Green Idea?" The Huntsville Times 4 April 2009



**Aneil Kumar, E.I.T.**  
*President/Chief Executive Officer*

**Education**

M.E.M. / Masters of Engineering Management April 2006  
BS / Environmental Engineering, 1999  
AS / Engineering, 1991

**Certification/Training**

Tax Planning Strategies for 2007  
Competitive Pricing Strategies- 2005  
Performance Based Contracts- 2005  
Service Contract Act-CSA 2005  
George Mason University- Federal Acquisition Regulations & Cost Accounting Standards 2003  
AWWA- Financial Management 2002  
Engineer-in Training Virginia 2001  
Loyola College- Business Executive Program 1998  
Tidal Wetlands, Virginia Institute of Marine Science, College of William & Mary, 1998  
Environmental Regulations Update, Old Dominion University, Norfolk, VA 1997  
AutoCAD, Tidewater Community College, Virginia Beach, VA  
Erosion and Sediment Control-Contractor, Commonwealth of Virginia  
Construction Quality Management, U.S. Army Corps of Engineers

**Experience Overview**

Through my work experience with government contractors and private industry I have developed a keen understanding of how to run all aspects of business operations. This includes understanding contract requirements and knowledge of the Federal Acquisition Regulation. My experience enables me to be actively involved in each aspect of the operations and quickly identify deficiencies or deviations, address them and Taproceed to have them corrected. I have experience in the development of proposals and pricing, maintaining client relations, development and implementation of operational procedures, administering subcontracts, preparation of taxes, establishing accounting practices, and executing a broad range of projects that have stringent requirements. Some of my significant professional experience is described below:

**Representative Experience:**

EXPERIENCE

**2003- President/Chief Executive Officer**

**Present** *Applied Services and Information Systems (formally Techlogic of VA)* *Virginia Beach, VA*  
A small information technology services company that was established in 1999 whose prime client base is small businesses. When I bought into this firm, it had lots of technical knowledge and capability, but lacked the business knowledge to capitalize on this and create growth. As I slowly implemented small operational and financial changes, the company began to turn around and is now showing some minor growth. Some notable impacts of my guidance are described below.

SELECTED ACHIEVEMENTS



*Evolve from an "on-call" service company to a "contract" service company*

- Constructed a service contract for long-term clients that offered an hourly discount for the purchase of a bulk of hours that was billed monthly.
- Developed proposal template that emphasized the benefits of out-sourcing system administration.

*Developed and implemented stringent cash and debt controls*

- Gained control of accounting practices and eliminated risky procedures and/or practices.
- Implemented stringent cash controls and minimized expenses and used additional cash to reduce short and long-term debt.
- Refinanced high-interest debt.

*Eliminated all outstanding taxes*

- Worked with skilled tax attorneys to negotiate and determine terms of all outstanding taxes.
- Made capital investments and ensured that taxes were paid within negotiated terms

1996-  
Oct.  
2005

### **Chief Administrative Officer**

*Engineering & Environment, Inc (E&E)*

*Virginia Beach, VA*

A small environmental services company that was established in 1991 whose prime client base are federal government agencies. When I started in 1996, I was one of four full time employees and was primarily responsible for fieldwork and CADD drawings. As the company grew, I took on many varied roles and projects and my level of responsibility increased, which has allowed me to utilize much of my previous management experience.

### **SELECTED ACHIEVEMENTS**

*Officer for implementing a CAS compliant accounting system*

- ◆ After receiving training and researching the requirements of Cost Accounting Standards (CAS), I customized the structure of the general ledger accounts and modified the recording procedures to ensure compliance with CAS

Once the new system and procedures were in place, I was able to establish indirect rates and develop a pricing model for all quotations.

Successfully passed several Risk Analysis and Financial Capability audits from DCAA.

*Officer for contract development & review and establishing compliance procedures*

- In 2001, I worked with the management staff and legal council to develop a subcontract template and teaming contract template.
- I was also responsible for review of all contracts and briefing staff on items of particular significance in relation to the scope of work.
- I periodically briefed project managers on changes in contracting language and reviewed records for compliance.

*Officer for EEI's Information Systems and supporting network*

- EEI capitalized on my knowledge of computers and computer networks by having me develop a network system that was capable of features such as remote access, high speed connectivity, mobile communications, data collection redundancy and wireless access on a very stringent budget.
- Modified system operating procedures to minimize down time and recovery time if a server were to fail.

*Spearheading E&E's Efforts on Department of Defense Utility Privatization Initiatives*

- Corresponded with federal Government contracting and technical representatives on proposal requirements and Technical Data.
- Prepared proposal sections and built pricing models that incorporated capitalized costs.

Created and delivered presentations on capability to manage utilities.



*Project Manager for Construction of New Corporate Office*

- ◆ Oversaw construction and worked with contractor to meet specifications.
- ◆ Acquired and coordinated efforts with utility and telecommunication providers.

*Project Manager for O&M of 1 MGD Wastewater Treatment Plant*

- ◆ Successfully transferred operations from federal Government in two weeks.
- ◆ Automated calculations and generation of daily reports and monthly NPDES reports.
- ◆ Preparation of invoices, progress reports and proposals under ID/IQ section of contract.

*Project Manager for Shoreline Improvements Projects*

- ◆ Prepared and Negotiated costs for project scopes with federal Government contracting officers, estimators and engineers.
- ◆ Preparation of all submittals in compliance with all federal, state, and local regulations.
- ◆ Preparation of Subcontracting Agreements and coordination with subcontractors.

*Project Engineer for Design of Tablet Chlorination System*

- ◆ Designed two viable options and prepared a cost-benefit analysis report for client.
- ◆ Applied and got approval for a new tablet chlorinator design from the Virginia Department of Health.

*Project Engineer for Preparation of SPCC Plans*

- ◆ Prepared Spill Prevention, Control and Countermeasures (SPCC) Plans for Maryland VA Medical Centers in compliance with all EPA, Maryland and Local requirements.
- ◆ Prepared Spill Prevention, Control and Countermeasures (SPCC) Plans for Air Force Space Command installations in Oahu, Hawaii in compliance with all EPA, Hawaii and Local requirements.
- ◆ Researched geological information and conducted interviews with specialist and operators.

*Field Supervisor for Drilling Operations*

*US Radium Corp. Superfund Site, NJ*

*Field Engineer for Phase II Site Investigation*

*Ashtabula, OH*

*Field Engineer for Sediment Sampling*

*Rochester Harbor, NY*

*Field Engineer for Solid and Hazardous Waste*

*Assessments and Remediation Services*

*Hampton Roads, VA*

1989-  
1996

**General Manager**

*KMG, Inc. and TMPR, Inc.*

KMG, Inc. and TMPR, Inc. are each management companies in the hospitality industry. For each my responsibilities included:

- |  |   |
|--|---|
| Design, Setup, and Operation and Maintenance of Facilities | Maintained all Daily Accounting functions and preparation of Financial Statements |
| Monitoring Quality Control                                 | Inventory Control   |
| Development of Budgets                                     | Cost Estimating and Monitoring  |
| Development of Marketing Strategies                        | Human Resources and Development of Employee Incentives                            |

**TECHNICAL SKILLS**

**Software:** Windows-based Office Suites, MS Project, Acrobat, AutoCAD, GIS.

**Operating Systems:** Windows 98, Windows NT, Linux

**Languages:** Fortran, basic HTML

**HONORS**

Excellence in Service, City of Virginia Beach, 1992

Chi Epsilon, 1999



APPLIED SERVICES &  
INFORMATION SYSTEMS, LLC

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# CLEAN ENERGY SOLUTIONS, Inc.

1385 Cambridge Street, Cambridge, MA 02139-1121 617-491-0443

## **Steve Morgan, President and COO**

Mr. Morgan was instrumental in launching the Cambridge Energy Alliance, an unprecedented energy efficiency and renewables campaign serving all customer sectors in the City of Cambridge. Mr. Morgan has been instrumental in devising the overall program design, determining a market plan, overseeing technical contractors, and assisting the financing arranging for the new venture, a partnership between the City of Cambridge and the Kendall Foundation.

Prior to joining CESI in the spring of 2007, Mr. Morgan was Vice-President of AMERESCO, and for sixteen years led the nation's largest energy services company division solely dedicated to serving multifamily buildings. He was responsible for energy efficiency investments which have surpassed \$175 million in the past ten years. The division serves public housing authorities, assisted and conventional housing clients, housing and energy agencies, and electric and gas utilities.

Formerly Board Treasurer of the National Association of Energy Services Companies (NAESCO) and presently on the American Council for an Energy Efficient Economy (ACEEE) Board of Directors, Mr. Morgan brings public and assisted housing policy, financing, and technical research issues before national decision-makers for the benefit of multifamily clients. Mr. Morgan also enjoys a national reputation in electric and gas utility energy efficiency program design and early implementation assistance. He has been an author, featured speaker and panelist at more than two dozen national energy forums over the past 30 years. He has testified before Congressional Subcommittees on renewable energy issues. He has provided energy efficiency consulting services to Fannie Mae, the Ford Foundation, the Department of Housing and Urban Development (HUD), the U.S. Department of Energy (DOE), Legal Aid offices, and both public and investor-owned utilities. Mr. Morgan has been the principal author and champion of Congressional legislative initiatives addressing energy efficiency in public housing over the past decade, and was primarily responsible for the energy efficiency measures addressing public housing in the 2005 Energy Policy Act.

Mr. Morgan holds a Bachelors and a Masters in Education degrees from Harvard University; and a Ph.D in Policy, Planning and Administration from Brandeis University.

## Cynthia Adams, LEED AP

9067 West End Circle, Crozet, VA 22932

O: 434.970.3909 C: 434.825.0232

[adamsc@charlottesville.org](mailto:adamsc@charlottesville.org)

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### Profile

- Extensive experience in networking and relationship building among government, business, and nonprofit organizations, as well as the general public.
- Considerable communication and interpersonal skills, enabling a proven ability to manage multi-faceted projects and build consensus among disparate groups of people.
- Successful entrepreneur in green building consulting, construction, and sustainable building products for new and existing structures.
- Hard working, analytical, willing to shoulder responsibility and leadership – never forgetting the importance of pacing, patience, and a sense of humor.

### Professional Experience

*2008 – Present Local Energy Alliance Program & Climate Protection Program Coordinator (Charlottesville, VA)*

Currently work for the City of Charlottesville coordinating and developing two related community-based efforts: our Local Energy Alliance Program (LEAP) and our Local Climate Action Planning Process. Both of these endeavors involve managing and consensus building among multiple institutions, governments, and private citizens. Both focus on reducing energy use in residential and commercial building stock through efficiency, conservation, and renewable energy.

As the LEAP coordinator, I work with SEEA, EPA, DOE, Virginia state energy office, Dominion Power, financing institutions, multiple stakeholder organizations, consultants, and staff from Charlottesville and Albemarle County to develop an energy efficiency program based on our winning proposal to SEEA's Local Energy Alliance grant RFP for \$500,000. As a lead author of LEAP's business plan and program designer of LEAP's Home Performance with Energy Star, I also coordinated the Technical, Nonprofit, and Municipal Advisory Committees to LEAP's Governance Board, as well as task forces on financing and commercial program strategies.

### Professional activities 2009:

- Attended national conferences Good Jobs/Green Jobs, American Comfort Institute, Home Performance with Energy Star, and ACEEE's Behavior, Energy and Climate Change on behalf of City of Charlottesville and LEAP.
- Presented on LEAP at Commonwealth of Virginia Energy Symposium, UVa's Darden Sustainability Conference, Senator Warner's Virginia Energy Summit, and the Blue Ridge Home Builder's Association annual dinner.
- Served on local USGBC chapter's event planning committee and on the James River Green Building Awards judging panel.
- Completed Harvard University graduate course on Climate Change and Social Impacts.

*2006 – 2008 Founding Partner Greener Side Consulting, member USGBC (McCall, ID)*

Wrote successful funding proposals for jobs, researched sustainable products and new technologies, developed strategies for clients to lower energy use, and facilitated meetings between architects,

builders, engineers, subcontractors, and homeowners to help their projects achieve LEED for Homes and New Construction certification. Given the cold climate of McCall, energy efficient building practices and technologies were an important focus of our consulting business. Projects included high-end residential homes, residential development, mixed-use development, and hospitality.

Professional Activities 2007 – 2008:

- Member of Sustainable Outlook for Long Valley (SOLV), McCall, ID; volunteered with local nonprofit to establish an Environmental Advisory Committee as part of city government. Helped write and present the proposal our city Council eventually adopted. Worked to define the mission statement and goals for the EAC.
- Boise chapter member of USGBC; held seminars on sustainability in our local community and worked to organize a local (McCall) sub-chapter of the Boise membership.

*2006 – 2008 Founding Partner Blue Heron Interiors, renamed Terra Blue Design Build Center (McCall, ID)*  
Created a design-build retail business which sold sustainable products and design services for construction. Mainly involved in client acquisition, vendor partnerships, project management, proposal and budget creation, design specifications, marketing, and meeting facilitation with builders, developers, designers, and private clients to promote green building. Our small staff effectively managed a group of over twenty subcontractors and did almost \$1 M in product sales alone. Business was sold to Green Foundations of Boise, ID.

*1998 – 2008 Founding Partner StoneMetalWood (McCall, ID and Lexington, VA)*  
Established McCall, Idaho's first green building company. SMW started with three employees and grew to over thirty, enabling us to perform framing, finish work, painting, and tile installation in house. Our central Idaho construction company pioneered many energy savings measures in our area, such as insulated concrete forms, spray foam insulation, structurally insulated panels, super air-sealed conditioned spaces with heat recovery ventilators, daylighting, and the incorporation natural ventilation measures into the home's design. At SMW, I created the marketing plan for our company, did project management, and lead public seminars to promote sustainable building practices.

StoneMetalWood's first forays into green building practices began in Virginia with the renovation of a 1786 brick farmhouse and custom-build of a 4 x 4 farmhouse, both of which were sold. With these projects we focused on indoor air quality, recycling and sourcing of materials, rehabilitation of land, and efficiency of construction practices and technologies.

*1994 – 2002 Owner PineNut Design (Charlottesville and Lexington, VA)*  
Researched and analyzed businesses for competitors, wrote reports and content copy, wrote marketing text and created ads for print, and developed websites. Also helped clients increase their web traffic through search engine optimization and the purchase of keywords and additional URI.s.

*1988 – 1994 University Instructor of English (Blacksburg, Harrisonburg, VA)*  
Taught writing and literature on the university level for seven years at institutions such as Virginia Tech and James Madison University, including professional writing courses.

**Education:** M.A. English, Virginia Tech 1990; B.A. English, Virginia Tech 1988, minor in Biology.

**ERIC A. GILCHRIST**  
1207 Belleview Avenue  
Charlottesville, Virginia 22901  
434-882-3179 ericg@ntelos.net

## **PROFILE**

- Nineteen years of successful and professional consultative marketing experience.
- Engaged in entrepreneurial environmental businesses for seven years.
- Effective in new business development and on-going account relationships with a wide range of diverse organizations.
- High personal motivation with knowledge of environmental issues and business applications.

## **PROFESSIONAL EXPERIENCES**

### **Project Coordinator** SPARK! Program, Charlottesville Community Design Center (2008-2009)

- Coordinating outreach and education efforts for a community wide residential energy efficiency program.
- Managing a pilot project to help 25 low-income families to receive energy audits and to create opportunities and means for these households to save energy.
- Achieved certification from Building Performance Institute as a Building Analyst, (Energy Auditor).
- Build working alliances with local governments, other key not-for-profit organizations and the local building trade.
- Creating various workshops and interactive exhibits to educate the residents on cost effective and easy ways to save household energy.

### **Principal Owner** Green Resources of Virginia (2004-2009)

- Developed new business providing marketing and outreach in Virginia for environmental organizations. Primary client has been Appalachian Sustainable Development (ASD). Significantly grew ASD's Sustainable Woods revenue and presence each year.
- Created and managed some of Charlottesville's first "Green Home Seminars and Tours" in 2005 and 2006. Sold out events increased in size as demand grew.
- Provided the "Green Home Seminars and Tours" template and consulting to the New River Valley and Blacksburg for their 2007 and 2008 events. Advisor to upcoming 2008 Floyd County Green Home tour.
- Launched Piedmont Sustainable Woods (PSW), a collaborative effort of local organizations starting March 2006. PSW now into next phase designing business and operating plans.
- General contractor for two remodeling jobs using best feasible green building materials and methods.

### **Adjunct Professor of Marketing** Piedmont Virginia Community College (2002-2004)

- Professor for Marketing 100, "Principles of Marketing". Three credit full semester course taught to over 110 students.

### **Marketing and Labor** Sugar Hollow Builders, Inc. (2003)

- Contributed construction labor on job sites and marketing knowledge to build eco-friendly homes, renovations and additions.

**Senior Key Account Manager** Accelrys Inc, (1989-1992, 1997-2002)

- Provided highly effective business and support interfaces between Accelrys scientific staff, management and our clients' computational research departments
- Consistent performer for Accelrys and in satisfying customers' requirements
- Top 15% of sales staff worldwide every year. Contracted over \$1.4 million gross margin annually.
- Highest revenue and quota leader in 2001
- Established sale offices in Washington DC (1989), Chicago (1997), and Charlottesville (2000)
- Recognized as the company's first Account Manager of the Year
- Sold company's first major system order, 40 systems to National Institutes of Health, significantly helping to ensure the company's financial viability and future

**President and Owners** Green American Resources, Inc. Fairfax, Virginia (1995-1997)  
GOOD for the EARTH Fairfax, Virginia (1993-1997)

- Pioneered and profitably managed "GOOD for the EARTH" retail operation, environmental products for consumers. The only one in Northern Virginia.
- Established first direct selling company of environmental products for businesses in Northern Virginia.
- Awarded second best environmental retail store out of 400 candidates. Award based upon sales volume and community support. (1996)

**Account & District Manager** Evans & Sutherland Corp. McLean, Virginia (1983-1989)

- Sold high-performance 3D computer graphics technology to commercial, government, and university accounts from Delaware to Virginia.
- Systems installations sold and installed within my territory grew by 350% within 2.5 years.
- Achieved highest percentage to quota for the company worldwide.

**Marketing Representative** Service Bureau Co. (IBM) Detroit, Michigan (1978-1983)

- Sold business oriented application software to major manufacturing companies in the Detroit area.
- Trained clients and installed systems tailored to their needs.
- Exceeded all annual quota objectives.

**EDUCATION**

- (32) Credit Hours - Global Ecology, International Honors Program, Bard College (1993)
- M.B.A. – Finance, Pennsylvania State University (1980)
- B.S. – Environmental Planning & Management, Pennsylvania State University (1976)

**AFFILIATIONS**

- Virginia Forest Watch, Board Member
- Sierra Club
- Citizens Committee on Environmental Sustainability
- Northwest Earth Institute, Simplicity Circle
- Wild Virginia, Past Board President

## CHARLES H. CARTER, P.E., LEED AP

<b>Education</b>  M.S., Civil Engineering, Villanova University, 1995. B.S., Chemistry, The College of William and Mary, 1991	<b>Contact Information</b>  1107 Cambridge Hill Lane, Keswick, Virginia 22947 434.531.2125 chcarter@ntelos.net
<b>Professional Registrations/Certifications</b>  LEED Accredited Professional Registered Professional Engineer, Virginia #33581 Licensed Residential Contractor, Virginia # 2705 066720A Groundwater Modeling Course (RCGRD) Groundwater Pollution and Hydrology Course (Princeton)	<b>Professional History</b>  Program Manager, PVCC Construction Academy, Current Operations Manager, Redlands, LLC, 2005 to 2009 Civil/Environmental Engineer, Eastern Research Group, Inc., 1995-1999. Master's Degree Program, Villanova University, 1994 - 1995 Senior Project Scientist, Consulting Services, Inc., 1991-1994.

### ***Higher Education Program Manager and Instructor***

I am currently the Program Manager and instructor for the Construction Academy at Piedmont Virginia Community College. The academy offers credit and non-credit programs in basic trade training, contractor code and licensing courses, and energy efficiency/green building curriculum. We are partially funded through DOL grants and strive to provide a range of construction training courses that meet the needs of our local workforce. We work closely with employers who support our program for guidance and insight into the needs of our construction industry.

### ***Construction Management and General Contracting***

For ten years, I owned and operated a design/build construction company. As a Class A General contractor, we generated annual revenues from 2M to 6M from all types of residential and light commercial construction. During this time, I have gained valuable experience in building science and construction techniques, as well as small business management skills. I have extensive experience with one and two story building design, civil and structural engineering, and general land planning. I also have an excellent working knowledge in mechanical, electrical and plumbing operations. I have developed multiple properties into single family and multi-family unit developments. I have worked with county and city authorities in the planning and permitting process for various development projects. My skills with Microsoft Excel, Word, Project, and Powerpoint are excellent, and I am very competent with various estimating and ordering programs. I am LEED accredited with experience in multiple green building programs, and I have served as Chair of the green building committee of the local home builder's association for the past two years. I believe strongly in affecting change in the ways we construct the built environment.

### ***Environmental and Project Management***

Prior to starting my own construction business, I was involved with several large environmental and civil engineering projects while employed with consulting engineering firms. This experience is mostly related to environmental field work, but speaks to the scope of my project management experience. These are a few examples:

- Project Manager for a ground water investigation of the DOE Middlesex Sampling Plant in Middlesex, New Jersey. This project involved a review of past site characterization results, a water level investigation, an on-site ground water sampling event, an off-site private well sampling event, and generation of sampling plans and reports.
- Field Engineer for a site investigation of the Copper Basin located in Ducktown, Tennessee. Soil, sediment, and ground water contamination were investigated for negative impacts from past mining activities.
- Project engineer for an effluent guidelines project of the centralized animal feeding operation (CAFO) industry. This project involved investigations of best management practices in place at various types of animal feeding operations.

## PROFILE

Accomplished technology and business integration generalist with 21 years of experience managing and supporting analytical research, business development, economic development, and financial and operations management in the rapidly growing and challenging global energy industry. Demonstrate strong strong entrepreneurial, analytical and technical communication skills highlighting an ability to create development and investment opportunities. Strong commitment to efficient, accountable, ethical corporate governance; able to adapt quickly to new environments, programs, and situations. Able to maintain and analyze accurate and thorough data to enhance processes which reduce costs and improve performance.

## EXPERIENCE

## MANAGING MEMBER, DIRECTOR OF RESEARCH &amp; ANALYSIS

*ThinkBox Group LLC*

1995 - Present

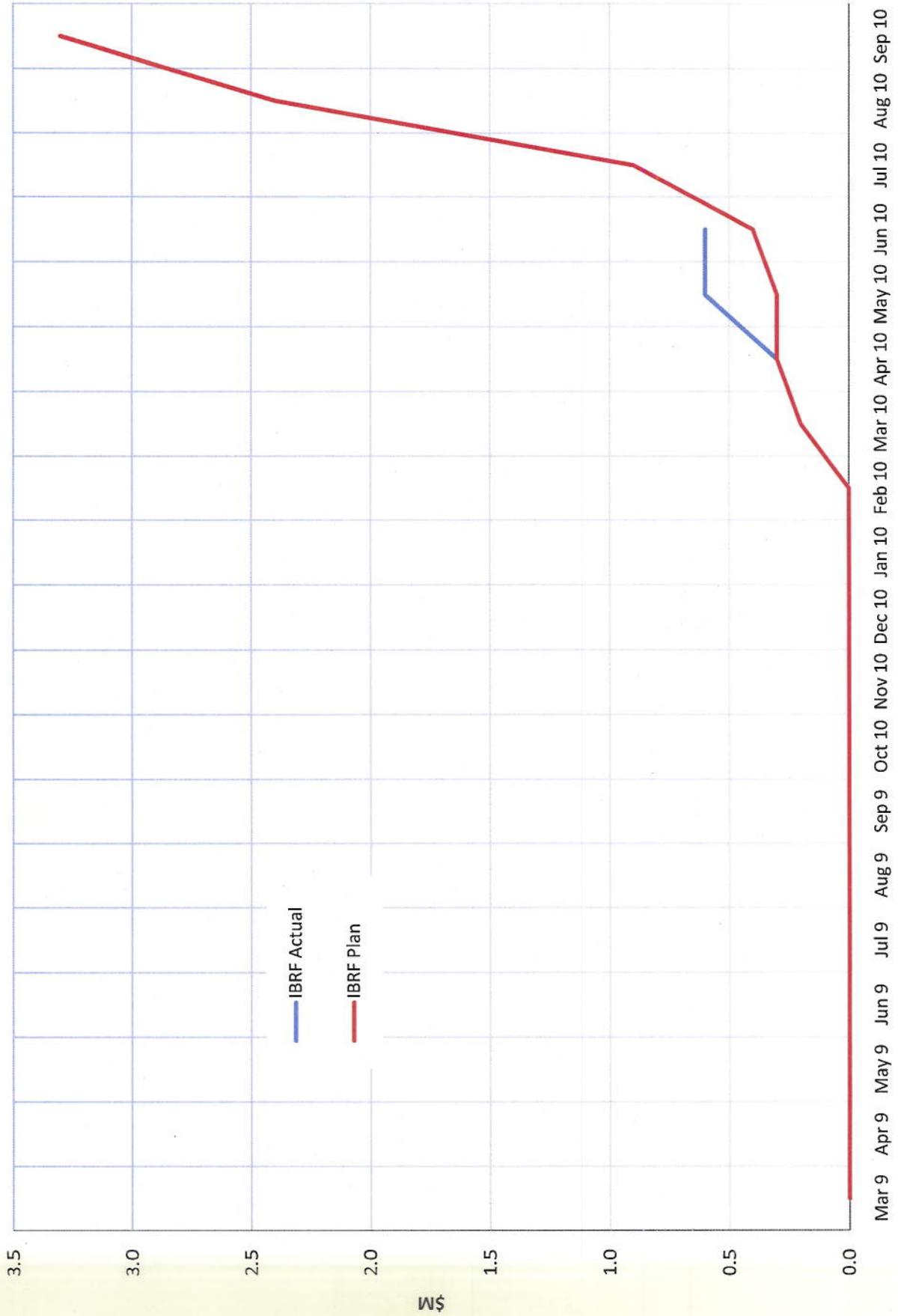
Co-founded company that develops, finances, acquires, and manages sustainable energy projects including energy efficiency, renewable power production, transportation bio-fuels. We provide "turnkey" project development services, developing clean power/energy projects that generate substantial savings and enhanced environmental performance for our clients and investors. We take the lead in the project development process. Through our strategic partners, we generate substantial returns by offering solutions such as - Biofuel Refineries, Biomass Gasification, Cogeneration, Energy Conservation Measures & Energy Master Planning, Solar Heating and Cooling and other renewable technologies. Through our investors, we are able to secure funding for projects, either that we own or simply develop.

Primary responsibility is for research and analysis on all aspects of energy and environmental project development. Areas of research include policy analysis, feasibility studies, agricultural supply analysis, infrastructure assessment, site assessment, biofuel market assessments, technology reviews, supplier and vendor identification, regulatory and permit application requirements, financial modeling, corporate structure assessment, political stakeholder interface, workforce development analysis and operational modeling.

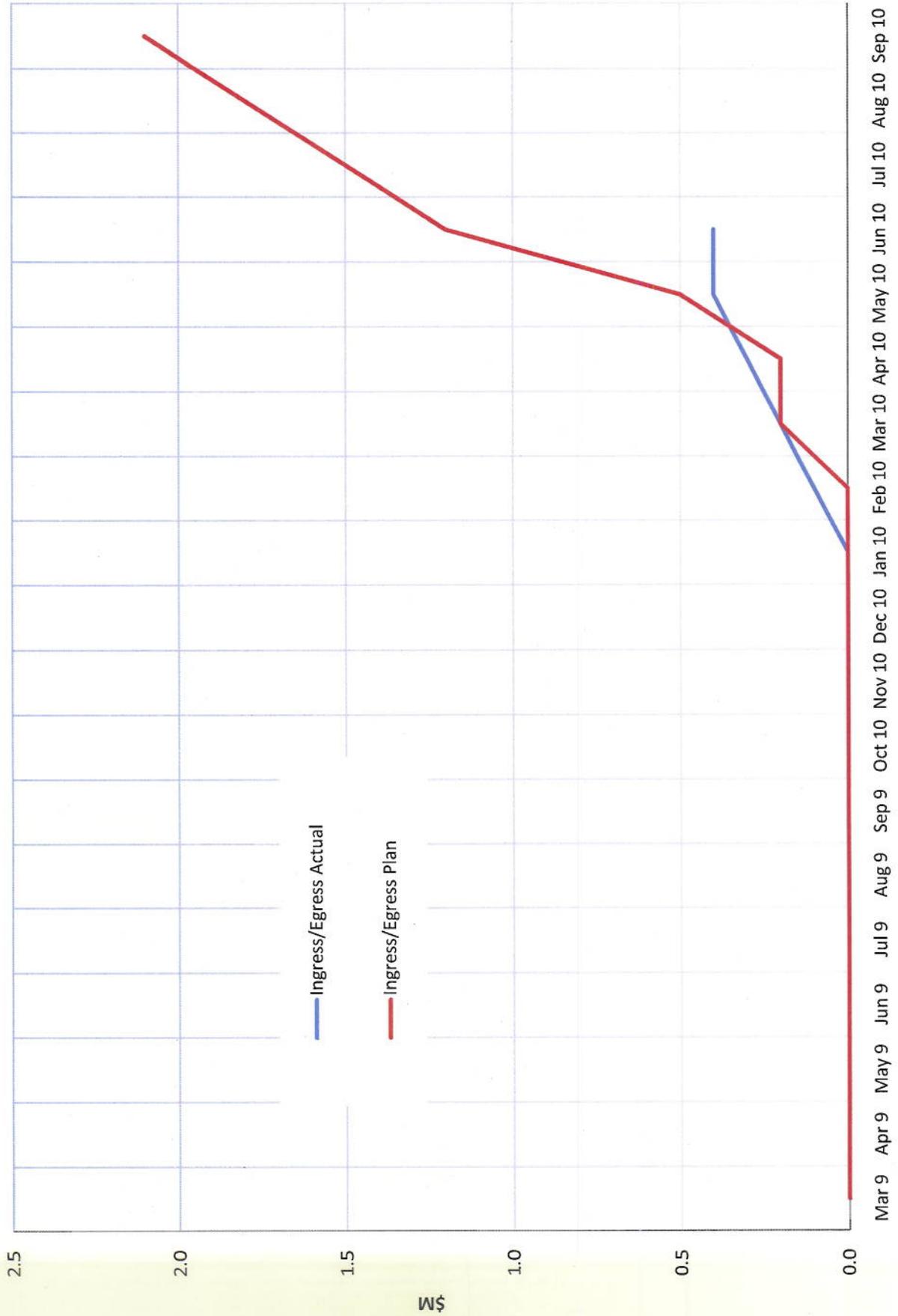
Other responsibilities include business development & management and subsequently establishing financial operations for all subsidiary and project engagements. Responsibility for developing, structuring and managing all aspects of accounting procedures and financial transactions, capital financing solutions and strategic business structures and acquisitions for large energy projects operating in a today's dynamic energy environment. Strong problem-solving and communication skills, ability to independently manage and execute multiple projects, superior financial modeling skills, well-developed financial statement development & analysis techniques and strong client service skills.

- Appointed by Virginia Governor Tim Kaine to serve on the Governor's Commission for Climate Change, a 32-member commission charged with the evaluation of expected impact, adaptation and preventative actions and policies with respect to climate change on Virginia's citizens, natural resources and economy. Also serve on the Governor's Energy Policy Advisory Council and the "Built Environment" subcommittee focusing on energy efficiency policies and codes for existing structures throughout the Commonwealth.
- Serve as Program Manager for the District of Columbia Housing Authority Energy & Environmental Program. This is the first of its kind public housing

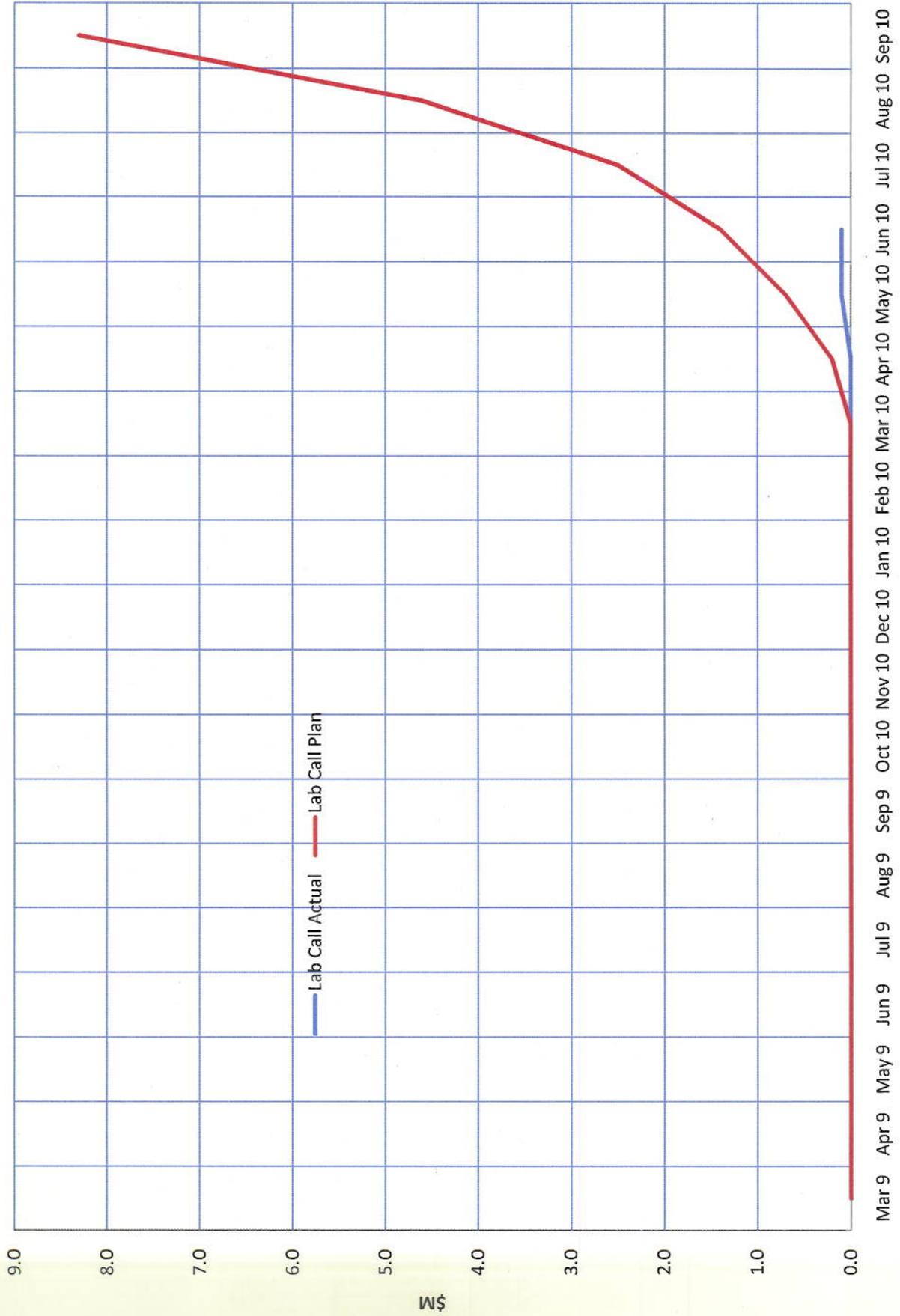
# IBRF II



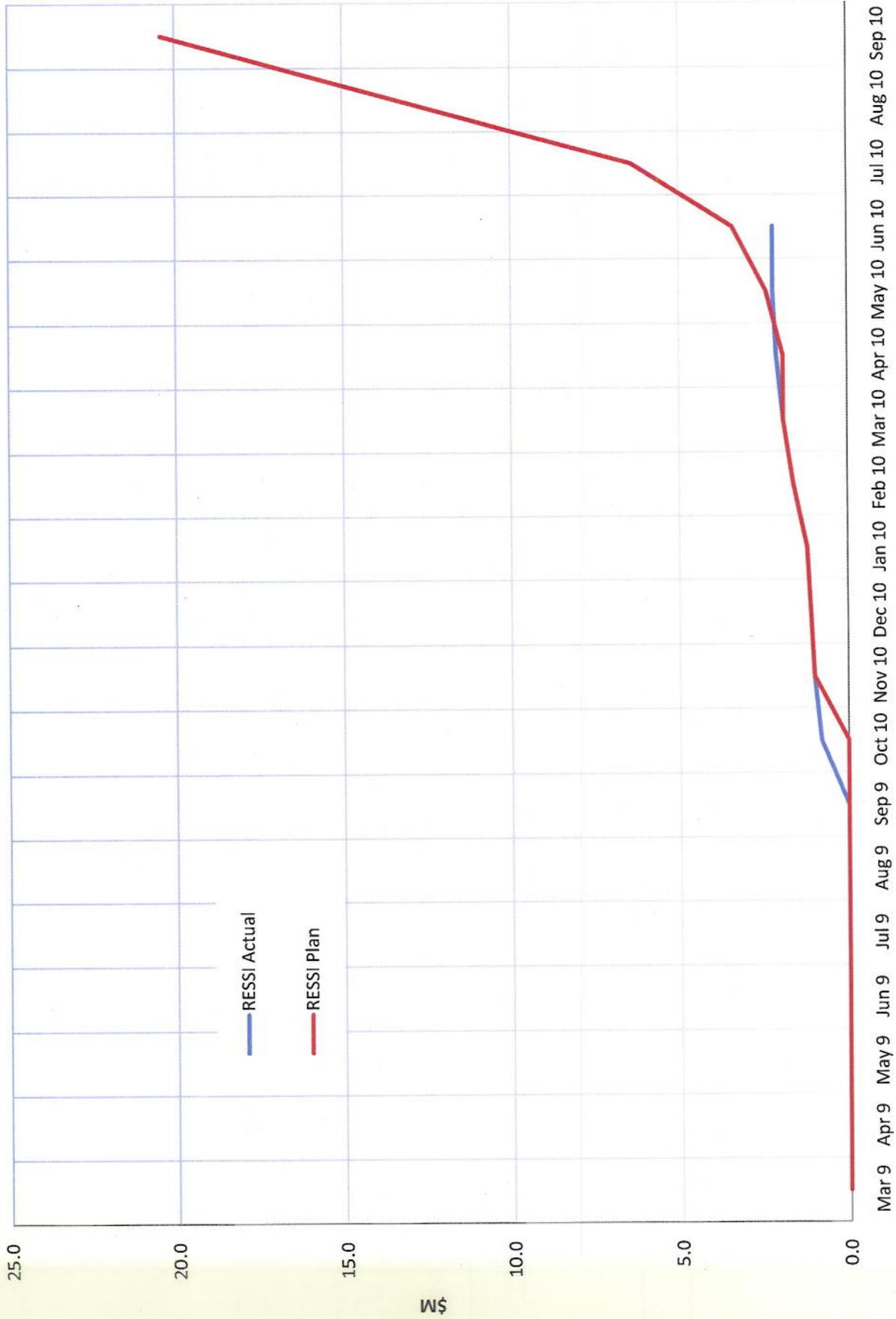
# Ingress/Egress



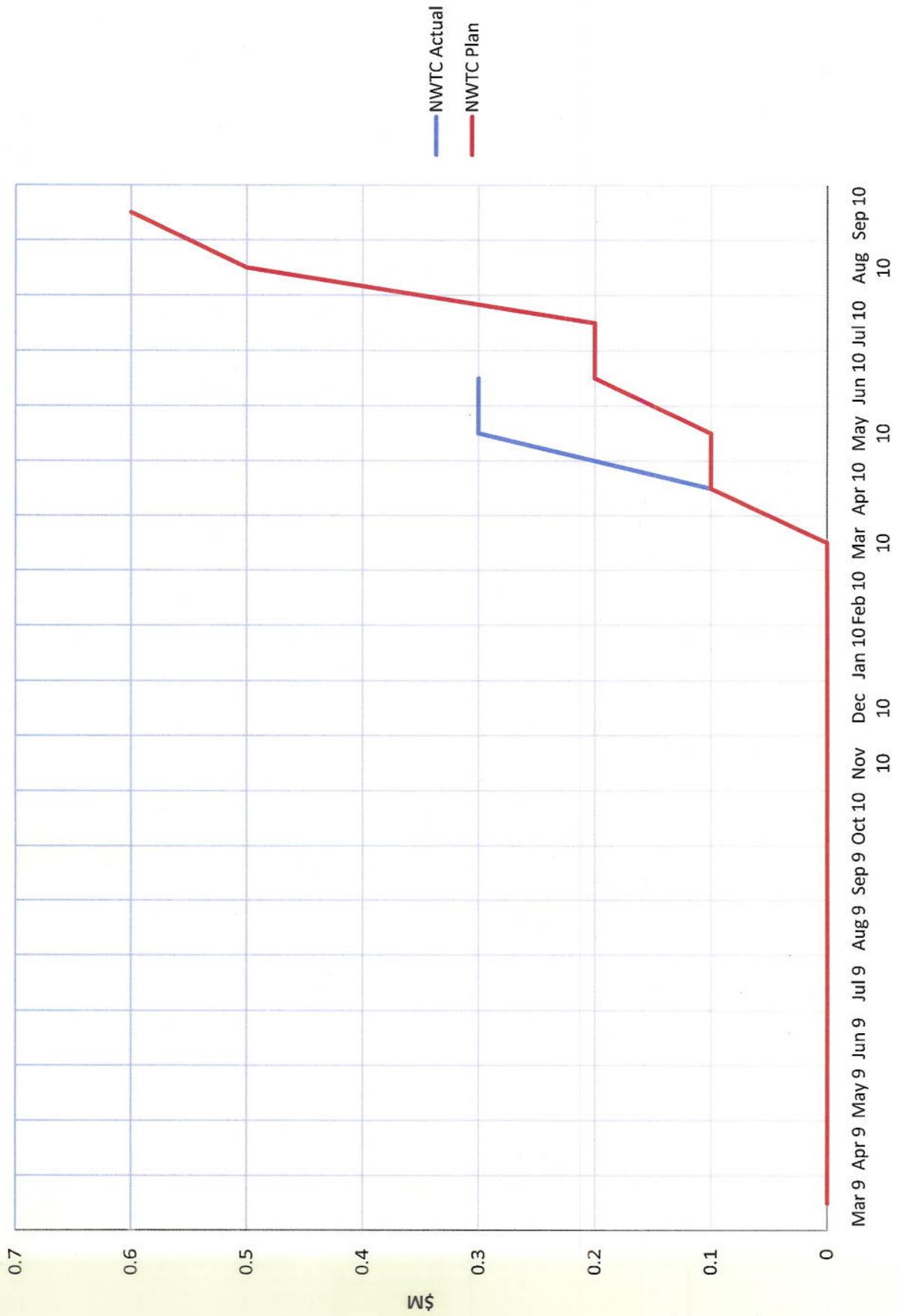
# Lab Call



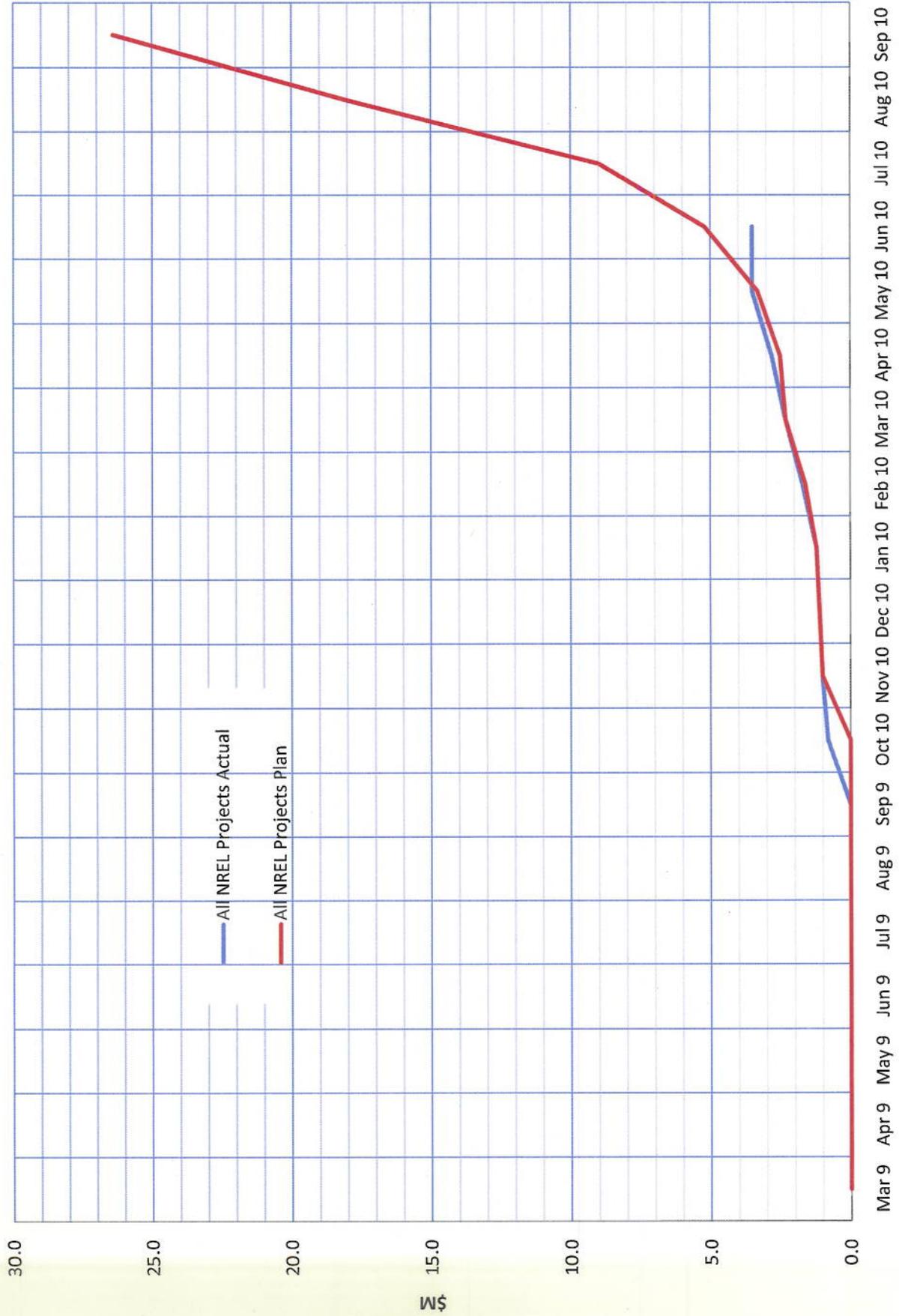
# RESSI (RSF II + Energy & Site Projects)



# NWTC



# NREL Projects (Excluding Lab Call)



FROM THE DESK OF  
PAUL ORENTAS

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authority (PHA) self-performing large energy and water efficiency program. Key achievements include:

- Established PHA policy documentation for the 10-step energy program.
- Established a comprehensive utility consumption database that serves as the cornerstone of the current utility billing & administration program since 2001.
- Established an energy aggregation and wholesale procurement risk management program which has saved the authority over \$5M in avoided utility costs.
- Serve as PM on the Energy Capital Improvement Program a \$26M energy retrofit program which saved the authority over \$8M in avoided capital costs and will reduce energy and water consumption by 25% when completed saving over \$4M a year.
- Most recently served as principal investigator and policy analyst on a study on the economic and environmental effects of biofuels in the Commonwealth of Virginia under Water Quality Improvement Fund Technical Assistance Grant # 440-S-06-02.
- Serve as Managing Member of LiquidMaize, LLC a Denver Colorado-based advanced biofuels production company. Credited with creating the *short-haul ethanol* business model.
- Served as Principal Investigator on DOE Cooperative Research Agreement DE-FC36-02GO12009 – Blackbelt Bioenergy Demonstration Project, an ethanol feasibility study for the Blackbelt region of the state of Alabama. A \$3 million study for the US National Renewable Energy Laboratory for the development of a bio-fuel based industry in the Southeastern United States, which refined LiquidMaize, LLC's combined ethanol production/cattle model.
- Served as Principal Investigator for the Department of Energy's Office of Utility Technologies grant # DE-FG01-99EE35130 biopower technology assessment and commercialization strategy. Authored the paper "Technology Roadmap For Marketing U.S. Biopower: The Role of Biopower in the New Energy Business Model" that identified a business model encompassing the business and new product development aspects of the U.S. bio-power industry, which became the foundations of Liquid Maize LLC's ethanol business model.
- Since 1998, developed clean energy projects and created multiple business plans for renewable energy focused economic development investment with a strong emphasis on ethanol fuels.
- Served as principal investigator on four Federal/State cooperative research and bio-fuel development initiatives.
- Serve as Contract Officer and Technical Representative for ThinkBox Group's General Services Administration Contract GS-21F-0030U

EDUCATION

THE GEORGE WASHINGTON UNIVERSITY  
*Washington, DC — Masters in Business Administration, 1996*

THE UNIVERSITY OF VIRGINIA  
*Charlottesville, VA — Bachelor of Arts in Physics, 1987*

**VICTORIA PLATT RACINE**  
622 Wilder Drive, Charlottesville, VA 22901  
434 249-4067 (C)  
victoria@originalink.net

## **EXPERIENCE**

### **BRIDGETREE, INC 2006 TO PRESENT**

Private technology firm specializing in analytics and strategy

#### **Managing Director**

Provide strategic direction to retail and energy industry. Engagements include

- **Lowe's Home Improvement: CEO** Developed Energy Impact Study
- **Lowe's Home Improvement: CRM Group** Created 3-5 year strategy for mobility program
- **Lowe's Home Improvement: Utility Program (CRM Group)** Developed database on 55,000+ utilities for rebates and incentives in energy efficiency. Currently building B2B portal for regulatory (EPA, DOE, and PUC's), utilities (gas, electric and water) and manufacturers (lighting, appliances) for energy efficiency reporting and metrics.
- **AllConnect: Utility Contractor** Conducted needs assessment with 8 of 29 utility customers. Created roadmap for new products and services for renewable energy and energy efficiency programs via call center
- **Reliant Energy: Acquisition & Retention Team** Delivered strategy to compete within a de-regulated market

### **LOWE'S HOME IMPROVEMENT 2003 – 2006**

The second largest home improvement chain in the US, Lowe's has more than 1,380 superstores in 49 states. Annual sales revenue \$43.2 billion.

#### **Manager CRM Marketing, Life Stage and Occasions**

Reported to Director of CRM Marketing. Supervised a team of 20 contract employees. Responsible for \$500 million in incremental sales and \$100 million net incremental margin. Included program management across multiple business units and campaigns (new moms, empty nesters, movers, and gift registry), sales analysis working in conjunction with merchandisers and product managers, data analysis, and P&L of \$24 million.

### **ALTAMONT PARTNERS 2002 – 2003 Strategic Advisory Firm**

#### **Principal**

Managed the creation of growth strategies for global payment companies who desired to streamline their process and change the economics of their business.

- Engagements also included sales management strategy and corporate communication advisory. Clients included Orange, Vodafone, T-Mobile, Royal Bank of Scotland, Gemplus, and TSYS.

### **GEMPLUS (HEADQUARTERS: MARSEILLE, FRANCE) 2001 – 2002**

Smart Card Technology for Government, Retail, & Financial Services.

#### **Director, Strategy, North America**

Responsible for creation of new market strategy to seed smart technology in the US based on security, authentication, identity services, and loyalty

### **SEURAT COMPANY / NEWORLD SOLUTIONS (ACQUIRED BY FAIR ISAAC) 1999 – 2001**

Relationship Management Consulting Firm.

#### **Director** – SEURAT COMPANY

#### **President & Owner** – NEWORLD SOLUTIONS (ACQUIRED BY SEURAT COMPANY)

E-Marketing Firm

Founder of Newworld; an e-marketing firm that delivered strategy and technical services.

### **MICROBAN PRODUCTS COMPANY 1997 – 1998**

Branded, Licensed Antibacterial Ingredient

#### **Marketing Manager, Medical/Pharmaceutical Products**

- Developed licensed additive strategy for the medical and pharmaceutical industry based on a combination of proprietary and patented technologies.

### **ALGA PLASTICS 1995 – 1997**

Custom Thermo former for pharmaceutical and electronic packaging.

#### **Business Development Manager, Southeast**

Contracted to identify and build business in two vertical markets within a nine state area.

### **ALCOA 1988 – 1995**

(Formerly Reynolds Metals Co.) \$400 million flexible packaging division.

#### **Account Executive**

Direct sales responsibility of \$20 million of flexible and rigid packaging for the confectionary, pharmaceutical and dairy industries.

## **RECOGNITION/AWARDS**

**MVP Special Achievement Award 1990:** First cultured dairy order for thermoformed PP Breyers Yogurt Cup. Reduced Municipal Solid Waste contribution (MSW) by 30%. Alcoa

**SSA (Strategic Supplier Alliance) Recipient 1992:** Five year contract for \$5MM annually in PVC film for Kraft General Foods. Alcoa

**US Government MRE XIII Award 1992:** One year contract for \$2MM to supply MRE's retort pouches (Gulf War) along with United Nations humanitarian effort in food supply. Alcoa

**VMR (Vendor Management Relations) Recipient 1993:** Five year contract for \$4MM annually at Planter Lifesavers for printed foil laminates, LDPE caps, wax mounted liner, and lubed foil. Alcoa

**R.O.A.R. Award, 1995:** Recognition of Achievement for Planters LifeSavers Project Management: Conversion of Stick-Free gum from paper to foil and the successful timing and launch of new product, Ice Breakers. Alcoa

**Contribution Award 1998:** Division exceeded \$100MM in sales- individual contribution of hard foil sales for Merck Pharmaceutical's Pepcid - \$1MM. Alcoa

## **EDUCATION**

BA, Communications – Kent State University, Kent, Ohio.

Course, Project Management, University of North Carolina, School of Engineering.

## **PROFESSIONAL TRAINING**

TQM Training, United Steel Workers Union- Dec 91'

Kaizen Team Leader- Nov 95'

## **ACTIVITIES**

Member, ***Charlottesville Investments for Micro Lending***, 2007 to present

Sub-Committee Member, ***Virginia Energy Bill 1416***, 2007

Board Member, ***Bond Financing Authority***, City of Charlotte, NC, 1994 to 2002

Team Member, ***National ID Task Force***, Gemplus

Speaker, ***California Association of Realtors***, San Diego, CA

Speaker, ***Real Trends Conference***, Denver, CO

Speaker, ***National Association of Realtors Conference***, San Francisco, CA

Speaker, ***IBM Tech Conference***, White Plains, NY

## **GEORG REICHARD, PH.D**

Assistant Professor of Building Construction  
Virginia Polytechnic and State University

### **EDUCATION**

Ph.D. in Building Construction, Graz University of Technology, Austria, 2000  
Dipl.-Ing. in Civil Engineering, Graz University of Technology, Austria, 1996

### **RESEARCH AND PROFESSIONAL/ACADEMIC EXPERIENCE**

Virginia Tech, Myers-Lawson School of Construction, Blacksburg, VA

*2005 to present - Assistant Professor of Building Construction*

Research in Building Construction and Building Sciences; Teaching Building Systems Technologies, Building Materials, IT in Construction, Building Sciences; Outreach (local municipalities, schools); Web Development and Programming ([www.caus.vt.edu](http://www.caus.vt.edu), [www.mlsoe.vt.edu](http://www.mlsoe.vt.edu)); Web Administration

Lawrence Berkeley National Laboratory, Berkeley, CA

*2002 to 2003 - Visiting Scientist*

Research, Interoperability of software tools and simulation models, Principal Investigator

Graz University of Technology, Graz, Austria

*2000 to 2004 - Assistant Professor of Civil Engineering*

Research in building sciences, field and lab experiments, thermal and hygrothermal (moisture) simulation; teaching Structural Analysis, Numerical Methods in Building Construction, IT in Construction; applied building science research for windows manufacturers.

Graz University of Technology, Graz, Austria

*1996 to 2000 - Full-time Research Assistant of Civil Engineering*

Research in numerical methods and building sciences; Teaching Structural Analysis Labs and IT in Construction Labs; software development for finite element simulations

Technical Data Management (TDV), Graz, Austria

*1994 to 1995 - Software Engineer*

Development of civil engineering design software

Civil Engineering Office Placht & Partner, Munich, Germany

*1992 to 1993 - Software Engineer*

Software development, training and management of civil engineering software

## RELATED PUBLICATIONS, COPYRIGHTS, PATENTS, AND SOFTWARE

- Chen, Q., Reichard, G., Beliveau Y. (2008). „Multi-Perspective Approach to Exploring Comprehensive Cause Factors for Interface Issues” - Journal of Construction Engineering and Management, Volume 134, Issue 6, pp. 432-441.
- Reichard, G., and Papamichael, K. (2005). "Decision-making through performance simulation and code compliance from the early schematic phases of building design." Automation in Construction, 14(2), 173-180.
- Reichard, G., Al-Mumin, A., and Papamichael, K. (2003). "INSTRUCTOR - Let the Experts Guide the Use of Simulation Software." Digital Design [21th eCAADe Conference Proceedings], Graz, Austria.
- Reichard, G. (2001). "Innovative Object Oriented Software- and Simulation Models in Building Physics", Verlag der Technischen Universität Graz, Austria.
- Reichard, G. (1998). "An object-oriented approach to educational software in building physics." SIGAPL APL Quote Quad, 29(2), 94-97.
- STAPS - Structural Analysis for Profile Systems for plastic facade systems. A Software Design Tool based on numerical and experimental research of façade and reinforced profile systems. Developed for RAL-Guetegemeinschaft Kunststoff-Fenstersysteme (GKFP) <http://www.gkfp.de/> (2002-2004)
- ATON – A Building Technologies Educational Software for calculating temperature and moisture distribution in constructions. Developed for BAUMIT, Austria, <http://www.baumit.com/> (1996-1999)

## SYNERGISTIC ACTIVITIES

I currently teach and have been teaching the courses “Building Technology Systems I + II” for undergraduate students in the building construction and construction engineering programs for the past five years at Virginia Tech. Furthermore I have been teaching the undergraduate courses “IT in Construction & Design” and “Building & Materials” here at Virginia Tech. On the graduate level I have been teaching the course “Applied Building Sciences” over the past five years.

At Graz University of Technology in Austria, I taught for 8 years courses such as “Structural Analysis”, “Advanced Numerical Modeling” and “IT in Construction”.

During my tenure at Graz University of Technology I developed a teaching / simulation software that allows for studying thermal and hygrothermal performance of building components in a synchronous application. This approach provides a way to directly study the impact of material and position of building layers in various envelope configurations. The software was later extended to work as a code compliance tool and used by the construction industry.

In 1999 I built a high performance house in Graz, Austria, which used only 25% of heating energy compared to other standard code complying houses built at the same. The house and surrounding soil has been equipped with several dozen thermal sensors, which were used to study long term transient thermal soil construction interaction of thermal bridges.

# Mandy Schmitt Mahoney

City of Atlanta, Division of Sustainability

55 Trinity Ave. SW, Atlanta, GA 30033

404-865-8965 mmahoney@atlantaga.gov

## EDUCATION AND TRAINING

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*Emory University, Bachelors of Science, Atlanta, GA 1997-2001*

Biology and Environmental Studies

*Duke University, Masters in Environmental Management, Durham NC, 2002-2006*

Energy and Water Resources Planning

*Emory University School of Law, Juris Doctorate, Atlanta, GA 2001-2006*

## PROFESSIONAL EXPERIENCE

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**Director of Sustainability, City of Atlanta, Atlanta, GA**

February 2008-Present

- Oversee, implement, and further develop Mayor's Sustainability Initiative Strategic Plan
- Foster, develop, and launch projects in partnership with city departments and external stakeholders
- Identify and secure funding resources for projects that have additional funding needs including the oversight of multiple federal and foundation grants

**Senior Associate, Ahmann, Atlanta, GA**

May 2007 to February 2008

May 2007 to February 2008

- *Public policy:* Continued leadership role on City of Atlanta comprehensive sustainability plan. Developed strategic plans for additional public private partnership projects including the Fort McPherson Redevelopment Plan. Developed and implemented community engagement campaigns.
- *Firm Development:* Oversaw internal strategic planning and development. Recruited new staff. Supported day to day operations.

**Associate, TopRight, LLC, Atlanta, GA**

August 2006 to May 2007

- *Public policy:* Under the direction of Atlanta's Mayor Shirley Franklin, developed the scope and strategic plan framework for the Atlanta's first comprehensive sustainability plan. Conducted best in class research about the leading 11 cities and 20 city and regional programs in North America.
- *Corporate Branding:* Worked with companies and creative agencies to develop original brands, competitive positioning, brand strategy, and brand launch.
- *Strategic marketing management:* Worked with companies to identify growth opportunities, develop products and build brands to achieve revenue and profitability by aligning marketing efforts across the enterprise to design and deliver profitable brand experiences for their customers.

**Senior Project Manager, BeltLine Partnership, Atlanta, GA**

Spring 2005 to July 2006

- *External Relations:* Developed and maintained relationships with leading business executives, public officials, and community members. Produce a variety of educational publications. Speak on behalf of the organization and coordinate events.
- *Planning & Operations:* Developed and implemented the BeltLine Partnership strategic and operations plan. Manage the staff and oversee consulting contracts.

Maintained relationships with the Board of Directors and partners organizations.

- *Financial management:* Managed a budget of over \$1mn. Coordinated funding activities and maintain relationships with donors.

### **SYNERGISTIC ACTIVITIES**

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<i>Ducks Unlimited</i>	2007-present
▪ Atlanta Chapter, Board of Directors	
<i>Green Chamber of the South</i>	2008-present
▪ Board of Directors	
<i>The Georgia Conservancy</i>	2007
▪ Chair, Eco Benefite- annual fundraising gala	
<i>The PATH Foundation</i>	2007, 2008
▪ Chair, PATHRocks- annual young professionals fundraising gala	

# William Hosken

## City of Atlanta

55 Trinity Ave., SW, Atlanta, GA, 30350

404-330-6892 bhosken@atlantaga.gov

## EDUCATION AND TRAINING

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*University of Toronto* Toronto, Canada 09/2000 – 05/2004

Bachelor of Commerce - Strategy & Economics

*Emory University, Goizueta Business School* Atlanta, GA 08/2007 – 05/2009

Masters of Business Administration Finance & Strategy

## PROFESSIONAL EXPERIENCE

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### *Senior Project Manager*

05/2009 - Present

City of Atlanta, Atlanta, GA

- Managing the City's stimulus funding strategy as it pertains to energy and the environment.
  - Designing and implementing the City's \$5.89 million Energy Efficiency and Conservation Block Grant strategy and procedures, with plans including a \$1 million internal revolving fund and a \$2 million residential energy efficiency incentive and financing program in partnership with Georgia Power.
  - Chaired a 9-party consortium including Coca-Cola Enterprises, UPS, Georgia Tech, and Emory to form and submit a successful bid for a \$43 million proposal to the Department of Energy for the deployment of alternative fuel and advanced technology vehicles.

### *Marketing Analyst*

2005 - 2007

Ford Credit Canada Limited, Oakville, Canada

- Established and communicated Canadian business requirements to vendors and US-based IT group for the successful launch of the company's new lease-end initiative affecting the entire \$2 billion portfolio.
- Received performance rating of 'Outstanding'; reserved for top 5% of employees.
- Managed priorities between Lease Product Manager, Brand Managers, and Marketing Director.
  - Handled lease-end project business requirements for Lease Product Manager: became head office point of contact upon his departure.
  - Maintained rapport with competitors and the company's field organization to provide competitive intelligence updates for Brand Management.
- Prepared and issued national dealer bulletins to communicate changes in corporate policies and processes.

### *Loan Officer*

2004 - 2005

Ford Credit Canada Limited, Toronto, Canada

- Analyzed and approved ~ \$180 million in consumer and commercial automotive finance offerings per annum.
- Conducted financial statement analysis and due diligence of prospective commercial customers and established credit lines of up to \$1 million.
- Negotiated marginal offerings with dealership management while effectively balancing credit risk and pressures to maximize manufacturer sales.
- Social committee member.

**SYNERGISTIC ACTIVITIES**

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*Energy Efficiency & Conservation Block Grant*

08/2009 - Present

City of Atlanta, Atlanta, GA

- Launching a \$2 million residential energy efficiency incentive and financing program in partnership with Georgia Power.