



Statement of Qualifications for

Energy Management Services

June 2016

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Verus Resource Management, Inc.

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Energy management is meaningful.

Verus Resource Management, Inc. (Verus) is purposed by the missions of our clients, and committed to provide holistic value, accountability, and excellence in support of federal energy management programs.



Company Profile

Established in 2014, Verus is a Hispanic-owned small business focused on advancing energy management programs within the federal sector. Verus delivers results through an experienced team of subject matter experts, representing a comprehensive portfolio of energy management acumen.

Verus has an extensive history of providing successful, financially-sound, and responsive project and task management. Our performance can be attributed directly to a flexible organization structure that maximizes our ability to form unified, interdisciplinary task teams quickly; and proven management procedures that establish a rigorous system of effective management controls. Our management approach relies on open lines of communication both internally, and with our clients. We ensure accountability at all appropriate levels for cost, schedule, quality, performance, and above all, client satisfaction.

Socio-economic Status

SB, SDB

Dun & Bradstreet Number

079517782

Clients

Federal government

Annual Revenue

Less than \$1 million

Headquarters

3524 W. 40th Ave.

Denver, CO 80211

For More Information

Mr. Jesse Maestas, President

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303-396-5819

www.verusrm.com

Professional References

Ms. Phyllis Stange

Department of Veterans Affairs

Office of Asset Enterprise Management

Green Management Program

810 Vermont Avenue, NW

Washington, DC 20420

Phyllis.Stange@va.gov

(202) 632-5962

Ms. Pamela Komer

Department of Veterans Affairs

Program Contracting Activity Central

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Pamela.Komer@va.gov

(216) 447-8300, X3682



Capabilities

Approach

Energy management is meaningful. Verus is purposed by the missions of our clients, and committed to provide holistic value, accountability, and excellence in support of federal energy management programs.

Unlike many firms that specialize exclusively in the technical aspects of energy management, we offer a full range of strategic, management, and support services that complement federal energy management programs.

Services

Verus concentrates on services in three areas: strategy and compliance, project facilitation, and outreach. With this approach, we are able to offer comprehensive energy management consultation. See pages 6-8 for more information on our service offerings.



U.S. Department of Energy (DOE) Approved Project Facilitation

Mr. Jesse Maestas, President of Verus, is an approved DOE <u>project facilitator</u>. The DOE requires federal agencies developing energy savings performance contract (ESPC) projects to work with a qualified project facilitator. Project facilitators offer experienced, unbiased advice and help guide agency acquisition teams through the ESPC process. To learn more about DOE project facilitators, visit the <u>DOE Office of Energy Efficiency & Renewable Energy web site</u>.

Verus has demonstrated proven experience that meets or exceeds the following DOE qualifications*:

- A demonstrated level of experience dealing with alternatively-financed projects.
- A demonstrated understanding of the issues involved in federal procurement of energy efficiency, water conservation, and renewable energy projects.
- Familiarity with the relevant ESPC contracting vehicle.
- In-depth familiarity with the technical and financial analysis tools to be used in project reviews. Examples include eProject Builder and energy conservation measures (ECM) benchmarking tools.
- Applicable background, continuing education, recent experience, and project management experience.

^{*}Source: Department of Energy, Federal Energy Management Program

Strategy and Compliance



Verus excels at the design, development, and execution of successful energy management strategies for federal organizations of all size. We design strategies through astute data compilation and analysis and ensure all strategies align with our clients' current operations, resources, and core missions. During design, we scrutinize all available data to identify gaps, outliers, and ultimately, key performance indicators (KPIs) that will drive a relevant energy management strategy.

Once Verus identifies and quantifies KPIs through data analysis, we work with our clients to create aspiring and attainable goals. We develop strategies with our clients' missions in mind, and establish a framework that will drive energy savings and efficiency, along with ancillary sustainability goals. We offer continued support with policy and procedural documents that help our clients institutionalize strategies and standardize tactics.

Verus understands that organizations are dynamic. Once we help our clients establish an energy management strategy, we offer continued support during project execution and modifications. Our team's agility allows us to adapt to changes quickly and effectively, and maintain consistency with our client's overarching strategy. We design energy management strategies to be living documents that focus on near-term goals and serve as a framework for long-term objectives.

Services

- Energy strategy development
- Energy planning

- Reporting and compliance
- Data analysis

- Project feasibility and modeling
- Acquisition planning



Project Facilitation



The DOE has approved Verus to provide project facilitation for ESPCs. As an approved project facilitator, our support includes acquisition compliance and project development facilitation. Moreover, we work with project acquisition teams to build strong relationships between the energy services company (ESCO) and federal agency. Our support starts at project formalization and ends when the project performance period is reached.

We offer support services that surpass routine DOE project requirements. From project identification, we provide advisory services for all alternatively-financed mechanisms, including utility energy services contracts (UESC), power purchase agreements (PPAs), and ESPCs. Our project identification and vetting capabilities help our clients extend limited resources. As an experienced project facilitator, we understand the importance of an effective acquisition team and project milestones. We offer the capabilities to build and support effective interdisciplinary stakeholders and can facilitate project progress, substantiate investment grade audit (IGA) pricing and practicality, and perform holistic financial analysis. Combined, these services help our clients maximize capital investment and minimize financial impact.

We excel at negotiation support. As an experienced arbitrator, we help to ensure that energy commodity, cost, and pricing values are accurate and agreeable. Our negotiation services provide contracting officers valuable information to work through the project process and negotiate a fair, effective, and successful project.

Our support doesn't conclude at project award. We support agencies to help ensure their measurement & verification (M&V) programs are effective at programmatic and project levels. Our M&V support allows agencies to understand and interpret performance. If project savings are not achieved, we offer the capabilities to support recourse and project modifications.

7 Statement of Qualifications

Services

- Project identification
- Alternatively-financed energy project facilitation
- Project management
- Financial analysis
- Energy procurement
- Negotiation support
- Measurement & verification
- Project modifications

Outreach



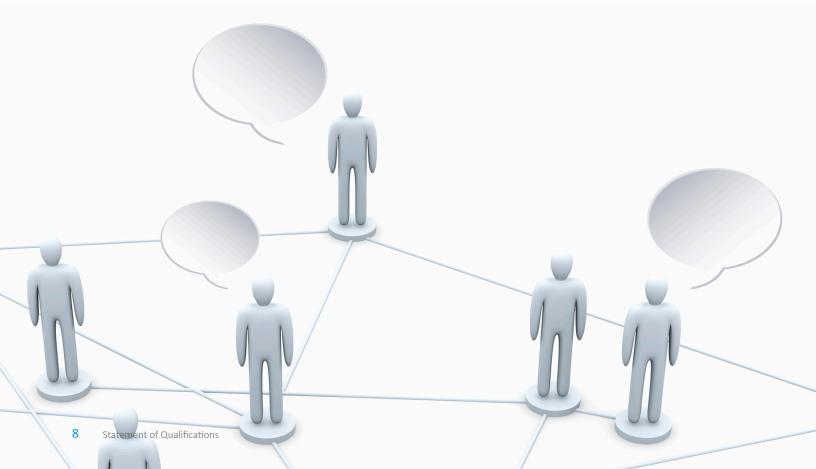
Verus understands that energy management can be complicated and rewarding, and that committed people are the essence of all energy management programs. We excel at building identities, communicating with stakeholders, reinforcing mission objectives among various audiences, and recognizing dedicated individuals and teams.

Verus outreach services help our clients build credibility through consistency and open dialogs through simplicity. We offer strategic and creative support that allows our clients to establish and expand their energy management mission through communication and build rapport with stakeholders.

We work with our clients and their public affairs officials, information technology, and marketing teams to ensure communications meet all agency standards and protocol, and we take pride in providing the highest levels of quality assurance.

Services

- Federal outreach programs
- Creative strategy
- Communications support
- Training and event logistics
- Policy development support
- Federal and industry awards
- Graphic design
- Media relations support
- Branding development





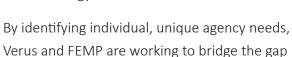
Client Experience

"Never doubt the power of a small group of committed people to change the world. In fact, it is the only thing that ever has." — Margaret Mead

Department of Energy

Federal Energy Management Program (FEMP) Large Campus Energy Initiative (LCEI)

Verus is helping FEMP develop the LCEI. The top 450 campuses expend 68% total federal energy use. While the LCEI is designed to establish best practices for all federal campuses regardless of size, the initiative will target the largest 450 campuses within the federal portfolio. Outputs will provide agencies with technical assistance, training, best practices, and information-sharing to curb federal energy use.



Top 450 Federal Campus Energy Use (BBTU)

Data provided by FEMP.

Data provided by FEMP.

Remaining Federal Energy Use (BBTU)

between project identification, development, and execution. The initiative requires a flexible and dynamic approach, with each campus or agency requiring unique tools.

To date, key activities include engagement with multi-agency senior leadership to identify energy management challenges and establish new or non-traditional approaches to these challenges. As part of this program, a wide variety of model or pilot projects are in development with agencies including the U.S. Air Force, U.S. Army, General Services Administration (GSA), and Department of Veterans Affairs (VA).





Large campuses include (left to right) Los Alamos National Laboratory and Johnson Space Center.

Data Analysis and Reporting

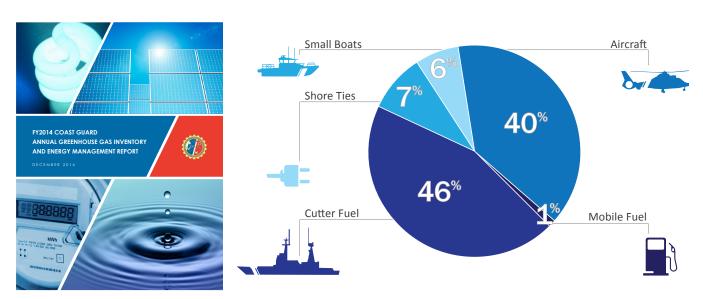
Verus provides as-needed data analysis to the Coast Guard. Analysis services provide quantitative results that substantiate resource prioritization, briefings, and mandated reports. Data analysis support includes mining, veracity improvement, documentation, and presentation of formal results. These efforts, along with project facilitation efforts, lend themselves to reporting and compliance consultation.

Reporting Documents and Systems

Verus plays a key role in the FEMP Annual Greenhouse Gas (GHG) Inventory and Energy Management Report, Office of Management and Budget (OMB) Max, compliance tracking system (CTS), and quarterly OMB scorecards. While federal mandates evolve, Verus has educated the Coast Guard of changing requirements, current performance, and how to remain compliant.

Strategic Planning

While long-standing, the Coast Guard Office of Energy Management COMDT (CG-46) was recognized officially in 2014. Along with formalization of the program, Verus has helped to establish and execute programmatic standards, tactics, and strategies. Verus is working with the Coast Guard to streamline and institutionalize a number of previously impromptu efforts regarding compilation and reporting of energy data within the Coast Guard, the Department of Homeland Security (DHS) and the DOE. As lead advisor for performance contracting, Verus is creating a formal process for identifying, developing, executing, and maintaining Coast Guard alternatively-financed energy projects.



Left: Verus provides comprehensive data analysis and compiles the FEMP Annual Greenhouse Gas Inventory and Energy Management Report. Right: Verus provides formal results as part of data analysis services. The infographic depicts tactical fuel expenditures for fiscal year 2014 and was used as part of a briefing to the Assistant Commandant for Engineering and Logistics.

Project Facilitation

Verus is the current DOE approved project facilitator for all Coast Guard ESPCs and provides facilitation for every performance-based project including UESCs and PPAs. In addition to supporting mandated services for alternatively-financed projects, Verus also provides the Coast Guard cradle-to-grave facilitation, funding, financing, energy accounting, and negotiation consultation.

This support includes pricing review, financial schedules, and funding opportunities to help ensure the Coast Guard is receiving the best price and an accurate, favorable project funding structure. Verus support services begin with project identification and development and continue through the performance period to ensure projects are performing as awarded. Verus also consults project modifications and verifies M&V reports.

Current Projects

Current activities include project facilitation support for a UESC at the Coast Guard Academy located in New London, Connecticut; an ESPC modification at the Coast Guard Yard located in Baltimore, Maryland; a UESC at Coast Guard Base Portsmouth, Virginia; and development of a demonstration energy project on tactical vehicles as a squadron-level UESC.





Above: Verus is currently supporting alternatively-financed project facilitation for an acquisition at the Coast Guard Academy (left) and a project modification at the Coast Guard Yard (right).

Outreach Services

Coast Guard and Federal Sustainability Awards Programs

Verus developed the Sustainability, Energy, and Environmental Readiness (SEER) awards program for the Coast Guard. The honorary awards program recognizes outstanding contributions to Coast Guard energy and environmental stewardship that align with the Commandant's Sustainability, Environmental and Energy Policy Statement and Executive Order 13693 *Planning for Federal Sustainability in the Next Decade*. Task management includes nomination solicitation, coordination of a cross-disciplinary selection committee, hardware and official commendation preparation, and all ancillary communications. Verus also prepares SEER nominations to compete in sustainability award programs at the DHS and presidential-level.

Multi-Channel Communications

Verus develops all communications on behalf of the Coast Guard Office of Energy Management COMDT (CG-46). Tactics include a semiannual newsletter, Earth Day and Energy Action Month campaigns, media relations support, and maintenance of two external websites and four intranet sites. Verus also ensures all communications adhere to official Coast Guard public affairs protocol.

Training Materials

With more than 50,000 annual fuel transactions, Verus works with Coast Guard fuel subject matter experts to develop comprehensive fuel procurement training materials. Services include content coordination, layout, editing, quality control, and clearance and promulgation procedures.







Left: Verus developed and facilitates the SEER awards program for the Coast Guard. Former Assistant Commandant for Engineering and Logistics, Rear Admiral Michael Haycock, holds SEER awards hardware. Center: Verus develops numerous training materials on behalf of the Coast Guard Office of Energy Management COMDT (CG-46), including an organizational handbook. Right: Verus provides media relations support, including internal outlets and industry publications such as The Military Engineer.

Briefing, Report, Policy, and Official Correspondence Support

Verus provides document support that includes content development, graphic design, editing, and quality control/quality assurance. Verus also coordinates the concurrent clearance and promulgation of policy and official correspondence on behalf of the Office of Energy Management COMDT (CG-46).

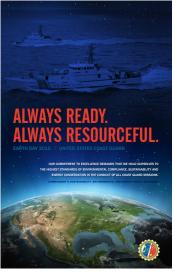
Community of Practice

Verus helped to establish and continues to support a Coast Guard Energy and Sustainability Community of Practice (ESCoP). The ESCoP fosters communication between a variety of professional disciplines to advance energy and sustainability initiatives within the Coast Guard. Coast Guard professionals can share career development, lessons learned, and other professional information pertinent to energy and sustainability. Task management includes agenda preparation, call logistics, follow-on research and training support, and ESCoP SharePoint maintenance.

Results // Best Practices

- In 2015, award support services led to two Coast Guard engineers named as DHS Sustainability Hero recipients
- Media relations support services resulted in front cover placement on the 2015 energy issue of *The Military Engineer*
- Superior communication support to COMDT (CG-46) led to Verus support at the Assistant Commandant-level, COMDT (CG-4)
- In 2015, Verus helped to develop first-time annual report metrics for COMDT (CG-46)







Left: example of Energy and Fuel Matters semiannual newsletter. Center: example of Earth Day poster. Right: example of website for the Assistant Commandant for Engineering and Logistics.

Team Experience

Our team members have successful backgrounds that demonstrate tangible results. We offer proven capabilities coalesced with a passion for providing our clients meaningful solutions and outstanding customer service.



Jesse Maestas, CEM, CEA

President



Mr. Maestas devotes his passion for energy management and sustainability to assist federal clients achieve meaningful project or programmatic goals. Mr. Maestas' experience includes all levels within an organization—from headquarters policy and strategy development—to project management and detailed analysis and implementation support at individual projects or buildings. For the past 16 years, he has helped a variety of public and private sector clients establish and refine energy programs. His contributions allow clients to focus on core mission while driving down costs and gain tangible progress toward key

energy and sustainability metrics.

Specifically, he has supported federal energy management and sustainability programs for the U.S. Coast Guard, U.S. Army, U.S. Marine Corps, U.S. Air Force, Federal Deposit Insurance Cooperation (FDIC) and FEMP, as well as variety of private sector firms.

Mr. Maestas earned a Bachelor of Science in engineering, mechanical specialty from the Colorado School of Mines in 1992. He earned a Master of Engineering in mechanical engineering from Stanford University in 1995, and is an Association of Energy Engineers (AEE) Certified Energy Manager, and AEE Certified Energy Auditor.

Mr. Maestas has delivered energy strategy development and implementation and associated project consultation that has led clients to millions of dollars of tangible savings, improved operations, and reduced maintenance. As a result, Mr. Maestas has been commended by industry and the federal sector for both his individual contributions and his efforts as part of a team.

Mr. Maestas is an established public speaker and has presented energy and sustainability topics at numerous regional and national conferences. He enjoys sharing best practices and lessons learned that help others understand and overcome potential obstacles within their organizations. Mr. Maestas has also supported several workshops aimed at training federal personnel how to implement ESPCs and UESCs.

Prior to establishing Verus, Mr. Maestas led a variety of business development, strategy development, program management, and data analysis activities for two major international architecture-engineering and consulting firms. Mr. Maestas started his career performing systems and operational engineering at two Fortune 25 firms.







Jesse L. Maestas, CEM, CEA President

Areas of Expertise

Strategic Planning Program Management Energy Engineering Financial Analysis Acquisition Planning Energy Procurement

Education

Master of Science Mechanical Engineering, Stanford University

Bachelor of Science Engineering, Colorado School of Mines

Years of Applicable Experience

25 Years

Registrations or Certifications

Certified Energy Manager, Association of Energy Engineers

Certified Energy Auditor, Association of Energy Engineers

Certified Demand-Side Management Professional, Association of Energy Engineers

Alternatively Financed Project Facilitator, Department of Energy

Mr. Maestas has extensive energy management and sustainability experience and has led the development and implementation of energy strategies for public and private sector clients. Recently, Mr. Maestas has supported clients with strategic planning, acquisition planning, and financial analysis for energy efficiency, renewable energy, and energy resiliency programs. He is currently serving as client manager for the U.S. Coast Guard Office of Energy Management, COMDT (CG-46) and the Federal Energy Management Program (FEMP) Large Campus Energy Initiative and is a Department of Energy-approved project facilitator.

Project Experience

FEMP Large Campus Energy Initiative Washington, DC

As initiative project manager, Mr. Maestas is working directly with the FEMP technologies services program manager to transition the initiative into a formal program focused on assisting federal agencies bridge the gap between identifying potential energy efficiency and renewable energy opportunities to implementation of projects. Large campus energy initiative projects will maximize overall operational efficiencies and demonstrate progress toward mandated energy and sustainability goals. To date, key activities have included engagement with multi-agency senior leadership to identify energy management challenges and establish new or non-traditional approaches to these challenges. As part of this program, a wide variety of model or pilot projects are in development with agencies including the U.S. Air Force, U.S. Army, General Services Administration, and Department of Veterans Affairs.

U.S. Coast Guard Office of Energy Management, COMDT (CG-46) Energy Program Development Washington, DC

As program manager, Mr. Maestas works directly with the Coast Guard energy manager to develop a strategic energy program for the agency's annual energy budget of \$300M. Activities include analysis of proposed and ongoing energy projects, identification and evaluation of alternative energy supply options, coordination of facility personnel, contract officers,



Publications/Presentations

Leveraging Your Advanced Metering Investment to Harness Measurable, Sustainable Savings SAME Pikes Peak Post Energy Workshop, August 2014

Trends in Energy Management, Where Should Your Next Investment Be? Today's Facility Manager Webinar, Susan Clarke, Jason Hartley, Andrew Padt, Jesse Maestas, June 2014

Turning Data into Action
Energy 2014 Technical Training
and Technology Showcase,
July 2014

Energy Efficiency and Renewable Energy in Puerto Rico — Case Study of Coast Guard ESPC GreenGov Symposium, Capt. John Hickey, Jesse Maestas, September 2012

Striving Toward Net Zero Using the ESPC Contract Vehicle SAME Joint Engineer Technical Conference, May 2012

Building an Energy Program from the Ground Up – a Case Study of the U.S. Coast Guard E2S2 Conference, May 2011

Laurent, Ben N., Maestas, Jesse L. *Unit-Level Support for Agency-Wide Change The Military Engineer,* May-June 2010, pp. 69-70

Fundamentals of Asset Mixing Energy 2006, August 2006

headquarters personnel, and contractors, and compilation of the annual Coast Guard Greenhouse Gas Inventory and Energy Management Report to Congress.

Mr. Maestas is the official project facilitator for the entire Coast Guard alternatively-financed project portfolio. He has supported more than 16 awarded alternatively-financed energy projects with a contract value of more than \$235M, including the following major projects:

- Energy savings performance contract (ESPC) –
 landfill gas-to-energy project in Baltimore, Maryland
- Power purchase agreement (PPA) photovoltaic array in Petaluma, California
- ESPC/energy services agreement (ESA) comprehensive efficiency and renewable energy in Puerto Rico
- ESPC multi-site efficiency project for Sector New York

Results of these projects and Mr. Maestas' support have allowed the Coast Guard to implement the appropriate projects to achieve evolving federal mandates and program goals within an environment with shrinking capital budget.

U.S. Air Force Academy (USAFA)
Net Zero Energy Implementation (NZEI) Plan
Colorado Springs, CO

As project manager, Mr. Maestas developed an implementation plan for the USAFA NZEI program. The plan is based on assessments of past energy management initiatives, planned energy initiatives, planned capital development projects, USAFA stakeholder input, and renewable energy assessments. The plan prioritizes upcoming projects and outlines annual investments required to achieve NZEI goals by 2020.

Naval Facilities Engineering Command Southwest Marine Corps Recruit Depot Energy Master Plan San Diego, CA

Mr. Maestas provided project management and technical support for the development of an energy master plan for the Marine Corps Recruit Depot. The plan focuses on strategies to meet federally-mandated energy and water reduction/sustainability targets and prioritizes existing conservation opportunities. Tasks include site visit/presentation, coordination with key facility personnel, energy and water utility data



Awards

2012 Federal Energy and Water Management Award – Project Team (Puerto Rico ESPC)

2011 Department of Homeland Security Chief Financial Office Award for Excellence – Energy Budget Model Team

2011 Federal Energy and Water Management Award – Project Team (Petaluma PPA)

2011 Department of Homeland Security Sustainable Practices Award – Green Innovation

FY2010 Department of Homeland Security Competition and Acquisition Excellence Award

2010 Federal Energy and Water Management Award - Small Group (CG Yard ESPC)

FY2007 Department of Homeland Security Competition and Acquisition Excellence Award analysis, prioritization of conservation measures, renewable energy screening, greenhouse gas emissions analysis, and creation of an integrative and sustainable energy master plan.

U.S. Army Energy Master Plan Fort A.P. Hill, VA

Mr. Maestas served as project manager. He supervised data analysis, identification, and modeling of cost savings measures used to develop short-term, mid-range, and long-term plans for Fort A.P. Hill. The plan helped Fort A.P. Hill implement tactics to meet or exceed statutory and Department of Defense requirements. He also coordinated data collection efforts among utility companies, facility personnel, and subcontractors.

U.S. Air Force 21st Space Wing Energy Program Technical Support Colorado Springs, CO

As project manager, Mr. Maestas worked with the 21st Space Wing facility energy manager to create an energy implementation plan that documents current progress towards energy goals, prioritizes energy projects accordingly, and estimates future progress towards those goals. Additional support was provided to identify energy efficiency upgrades and best practices for mechanical equipment in the data centers on the base.

Federal Deposit Insurance Corporation (FDIC) Energy Management Program Development Arlington, VA

As project manager, Mr. Maestas worked directly with senior leadership to formalize the energy management strategy and to develop a nationwide energy program for the FDIC. Key activities included developing an annual energy plan and associated federal reports, developing the key performance metrics to define and measure progress of the FDIC energy program, as well as recommendations to support operational goals. These activities have also allowed for the initial development of an outreach program and advanced metering data management programs.



Park County
Capital Improvement Plan
Park County, CO

Mr. Maestas served as task manager for energy-related activities for the county-wide capital improvement plan (CIP). Key activities included an evaluation of building conditions, operations and energy usage, assessment of renewable energy potential and integration of energy efficiency and operational improvements into the CIP recommendations. The resulting CIP included a strong focus on building energy efficiency and performance, as well as building use and expected service life of existing and planned real estate portfolio.

Kraft Sustainability Roadmap Naperville, IL

As project manager, Mr. Maestas supervised data analysis, identification, and modeling of cost savings measures to develop short-term, mid-range, and long-term plans for the Kraft Naperville plant. The roadmap helped the Kraft Naperville plant to meet or exceed corporate sustainability goals. The roadmap included the identification of projects with annual savings of more than \$1.5M with simple payback of just over one year.

U.S. Army Air Force Exchange Service (AAFES) Energy Audits Various U.S. Locations

Mr. Maestas managed the review and evaluation of energy savings opportunities for AAFES facilities at F.E. Warren Air Force Base (AFB) and McConnell AFB. Key activities included compilation and evaluation of utility data, review of utility billing rates, identification of low-cost/no-cost energy savings opportunities, and development of capital-intensive energy and water conservation measures. Results were incorporated into an energy and water implementation plan and recommendations for changes to host command agreements for billing and operations and maintenance.

Department of State/Energy Affairs Administration Energy Audits San Juan, PR

Mr. Maestas managed preparation of an energy audit for the Department of State facilities in San Juan, Puerto Rico. He identified and developed low-cost/no-cost energy and cost savings opportunities, billing errors,



operations and maintenance improvements, as well as capital-intensive energy and water conservation retrofits. He managed a roadmap for implementation of projects as well as recommendations for expansion of the overall energy program.

Santa Barbara Department of Public Works Feasibility Analysis Santa Barbara, CA

Mr. Maestas prepared detailed technical analysis and cost estimates for fuel cells, micro turbines, and reciprocating engines as cogeneration technologies for the El Estero Wastewater Treatment Plant. He determined the preliminary siting, emissions, and permitting requirements for each technology and presented cost estimates and sensitivity analysis for different economic factors.

Kennecott Land Company Daybreak Renewable Energy Study South Jordan, UT

Mr. Maestas served a project manager for Kennecott Land Company's renewable energy feasibility study. Daybreak is a master-planned community of 4,125 acres, including 93,000 acres for long-term development. The study's goal was to identify the most feasible technologies for application in the communities, taking into account technical, location, market, economic, and regulatory factors. Mr. Maestas identified, screened, and ranked different technologies based on these considerations, as well as provided recommendations for implementing these technologies.

Matt Croshal, CEM Senior Consultant



Mr. Croshal brings a flexible and dynamic approach to energy management and project development and execution. Having worked in a number of energy-centric roles for a variety of clients during his career, he is proficient in data compilation and analysis, technical review, financial analysis, and project development and facilitation. His contributions have established the framework for feasibility studies, energy master plans, energy efficiency project development documents, renewable energy projects, and energy security for a variety of public sector clients.

Specifically, Mr. Croshal has supported energy management for the U.S. Coast Guard, U.S Marine Corps, U.S. Air Force, U.S. Army, FDIC, and FEMP.

Mr. Croshal earned a Bachelor of Science in mechanical engineering and a minor in business from Lehigh University in 2010, subsequently receiving a master of engineering in energy systems engineering from Lehigh in 2011.

Mr. Croshal has proven his ability to work effectively at various levels within a federal organization. He has created planning and policy documents and executed projects for individual sites and headquarters-level offices.

Through his understanding of both energy engineering and finances, he has helped to facilitate numerous alternatively-financed federal energy projects. He is also skilled in data analysis, data forensics, and programmatic planning. Prior to his current role with Verus, Mr. Croshal supported mechanical design, facility planning, financial analysis, data analysis, project management, and business development.







Matt Croshal, CEM Senior Consultant

Areas of Expertise

Federal Energy Reporting
and Compliance
Data Analysis
Data Gap Analysis
Facility Energy
Conservation Studies
Renewable Energy
Technical and Financial Analysis
Project Feasibility and
Financial Modeling
Project Management and
Facilitation

Education

Master of Engineering Energy Systems Engineering, Lehigh University

Bachelor of Science Mechanical Engineering, Lehigh University

Years of Applicable Experience

6 Years

Registrations or Certifications

Certified Energy Manager, Association of Energy Engineers

Engineer in Training

Mr. Croshal is a mechanical engineer with demonstrated experience in energy management projects in the public sector. His principal duties concentrate on energy data compilation and analysis, which has established the framework for feasibility studies related to renewable energy, micro grids, and energy security. Federal clients include the U.S. Coast Guard, U.S. Air Force, U.S. Marine Corps, U.S. Army, Federal Deposit Insurance Cooperation (FDIC), and Federal Energy Management Program (FEMP).

Project Experience

FEMP Large Campus Energy Initiative Washington, DC

Mr. Croshal provides project support for the FEMP Large Campus Energy Initiative. The initiative was formalized to help agencies better approach energy management at the campus level, and assist campuses in moving from project identification to project execution. Mr. Croshal is helping to identify and pursue model opportunities to assist individual campuses and develop best practices.

U.S. Coast Guard Office of Energy Management, COMDT (CG-46) Energy Program Development Washington, DC

Mr. Croshal is currently providing project support for the Coast Guard including data reports, energy analysis, financial analysis, and performance contract project support. He contributed to the compilation of the Coast Guard's Annual Greenhouse Gas Inventory and Energy Management Report from 2010-2014, numerous Department of Homeland Security (DHS) quarterly reports, and is the lead liaison for tracking and populating information into the Department of Energy (DOE) compliance tracking system (CTS). Mr. Croshal has performed a site-by-site energy and accounting investigation of the Coast Guard's largest facilities and also served in a project management role for a previous Coast Guard energy program support contract.



He has performed ad hoc consultation including liaise services to DHS, advising the development of an energy business intelligence tool, and analyzing fuel data and fuel data processes to provide Coast Guard budget officers with quantitative results on a regular basis.

Since 2012, Mr. Croshal has provided data and financial support for energy savings performance contract (ESPC) project development and has supported five different performance contracts as a buyer's representative. This support spans project identification and initiation through the performance period and includes reviewing contractor-provided data, performing financial analysis, and reviewing data for negotiation support. Additionally, Mr. Croshal is currently developing an alternatively-financed project process guide to document and solidify the Coast Guard energy project process.

U.S. Coast Guard Covered Facility List Validation and Fuel Procurement Support Washington, DC

Mr. Croshal served as project manager and lead engineer for the validation of the Coast Guard's covered facility list. Due to the large portion of this project that was subcontracted, Mr. Croshal was required to manage both his internal team and subcontractors. As lead engineer, Mr. Croshal visited numerous Coast Guard locations and worked with facility engineers to reconcile energy purchases with end use, ultimately delivering the Coast Guard a level of high-quality facility energy data that was previously unavailable.

Naval Facilities Engineering Command Southwest Marine Corps Recruit Depot (MCRD) Energy Master Plan San Diego, CA

Mr. Croshal supported the development of an overall energy master plan for MCRD. The master plan laid a framework to ensure MCRD compliance with statutory energy requirements. His contributions included a utility data analysis that revealed anomalies and trends, and an investigation on how these issues affected MCRD energy management objectives. To assist with the energy program development, Mr. Croshal also developed a financial case for the addition of photovoltaic panels.



Young Men's Christian Association (YMCA) Solar Power Purchase Agreement (PPA) Analysis Hockomock, PA

Mr. Croshal provided technical oversight and consultation to the YMCA on a proposed photovoltaic PPA contract. He compared proposed figures and production numbers with industry standards to verify contract expectations. In addition, he analyzed the existing utility structure to ensure that entering into the PPA was in the best interest of the YMCA. The final report guided YMCA in making proper PPA adjustments and validated expectations before entering into the contract.

Governor's Pavilion/Energy Affairs Administration Energy Audits San Juan, PR

Mr. Croshal provided project support including a preliminary audit of specific buildings and the development of inspection guidance to facilitate successful audits with minimal supervision thereafter. By performing an energy use analysis, Mr. Croshal directed the audits to provide greatest resultant impact. Additionally, he created guidance documents for building audits, to ensure that future audits were done correctly and effectively.

Federal Deposit Insurance Corporation (FDIC) Energy Master Plan Arlington, VA

Mr. Croshal helped support the development of an energy master plan for the FDIC. Along with energy use analysis, he completed a greenhouse gas/carbon footprint analysis and developed a portfolio of metrics that could be tracked by the FDIC when quantifying energy conservation measures.

Mr. Croshal developed a tool that provides information on the efficacy of potential energy projects, allowing the FDIC to make informed selection of future projects. The energy master plan provides the FDIC with a strategy for compliance with federally-mandated reductions while maximizing cost savings and project value.



Marine Corps Mountain Warfare Training Center (MWTC) Energy Master Plan Bridgeport, CA

Mr. Croshal helped support the development of an energy master plan for the MWTC. Support included data compilation, data analysis, energy conservation measures review, and key metric development. A key task performed during this project was the development of a photovoltaic maximization analysis which identified the largest practical system for the facilities energy requirements and solar potential. This study identified that planned photovoltaics would produce beyond the requirements of the base, and would not provide the energy and financial benefits previously expected. The document has since been leveraged by the site to adjust their photovoltaic system and has re-directed their energy management pursuits to fit their requirements.

Luis Muñoz Marin International Airport (LMMIA) Observations and Impressions Report San Juan, PR

Mr. Croshal performed an energy analysis to support the development of a public-private partnership at the airport by providing an accurate depiction of the energy usage, maintenance activities, and potential energy upgrades. The project resulted in an observations and impressions energy study that identified opportunities to improve efficiencies in the heating, ventilation, and air conditioning system, and industrial equipment at LMMIA. These opportunities were developed into conservation measures with associated savings and implementation costs. The forecast of long-term airport operations and maintenance activities allowed potential contractors to propose more accurate bids.

GES Inc. and the Pennsylvania Turnpike Commission Compressed Natural Gas (CNG) Vehicle Technical Study Lehigh, PA

Mr. Croshal analyzed the technical feasibility of converting the Turnpike Commission's heavy duty vehicle fleet and passenger vehicle fleet to CNG vehicles. The study encompassed conversion technology, refueling station equipment, and operational feasibility. Mr. Croshal considered best available technology and industry standard technologies for all aspects of the project. Results have allowed GES Inc. and the Turnpike Commission to maximize operational effectiveness while reducing greenhouse gas emissions.

Andrea SnyderOutreach Manager



Ms. Snyder's combination of expertise brings a unique approach to strategic communication and creative services for federal energy management programs. She has designed visual communications for 20 years, and for almost a decade, has developed outreach and communications programs. Her experience spans the public, private, and non-profit markets.

Specifically, she has supported energy management, environmental, or sustainability programs for the U.S. Coast Guard Office of Energy Management,

U.S. Navy Chief of Naval Operations Energy and Environmental Readiness Division, U.S. Marine Corps, U.S. Army Environmental Command, U.S. Air Force Space Command, and FDIC.

Ms. Snyder earned a Bachelor of Fine Arts in graphic design from Texas Christian University in 1997. In 2014, she completed a graduate certificate in professional communications with an emphasis in marketing and public relations from the University of Denver.

Ms. Snyder is practiced in brand and messaging development and implementation, creative strategy, internal communications, and event planning. Her passion for creativity, and commitment to outstanding deliverables, among both peers and clients, has generated numerous accolades.

Prior to her current role with Verus, Ms. Snyder supported business development, and client-side and internal communications at several national architecture-engineering firms. Ms. Snyder started her career with tenures at numerous established advertising and design firms in the Dallas-Fort Worth area.







Andrea D. Snyder Outreach Manager

Areas of Expertise

Federal Outreach Programs Strategic Communication Policy Development Support Graphic Design Creative Strategy

Education

Graduate Certificate
Professional and Organizational
Communications,
University of Denver

Bachelor of Fine Arts Graphic Design, Texas Christian University

Years of Applicable Experience

20 Years

Awards

2011 Navy Chief of Information Merit Award - *Currents* Magazine

2011 MarComm Gold Award -BDCP Speakers' Bureau Presentation Ms. Snyder has extensive experience providing outreach, communications and creative consultation to clients spanning the public and private sector. She has developed comprehensive outreach programs and provided complex graphic support for a wide variety of clients including federal agencies, municipalities, private industry, and non-profits. Federal clients include the U.S. Coast Guard, U.S. Navy, U.S. Marine Corps, and U.S. Air Force.

Project Experience

U.S. Coast Guard Office of Energy Management, COMDT (CG-46) Washington, DC

Ms. Snyder has served as the outreach analyst and training manpower developer for COMDT (CG-46). In these roles, Ms. Snyder provides programmatic consultation for outreach, graphic development, communications management, and policy development for the Coast Guard workforce. Ms. Snyder performs continual strategic development, technical writing, and maintenance of outreach deliverables required by COMDT (CG-46). She ensures all deliverables are consistent with official Coast Guard instruction and receive appropriate authoritative concurrence for both internal and external messaging/distribution. Specific contributions include:

- Development support, clearance, and promulgation of COMDTINST M4100.2E, Coast Guard Energy Management Policy, March 2014.
- Co-development and authorship of the Commandant's Sustainability, Environmental and Energy Policy Statement, July 2014.



- Development, authorship, clearance, and promulgation of COMDTINST 5090.5C, Coast Guard Sustainability, Energy, and Environmental Readiness (SEER) Awards Program, May 2013.
 First-year SEER award recipients were announced in alignment with Earth Day 2014. In 2015, awards support resulted in recognition with the Department of Homeland Security (DHS).
 Two Coast Guard engineers were recognized as DHS Sustainability Heroes.
- Development and continual management of *Energy and Fuel Matters*, the semiannual COMDT (CG-46) newsletter targeted toward Coast Guard energy stakeholders. Ms. Snyder has contributed to various Coast Guard and federal newsletters on behalf of COMDT (CG-46). Ms. Snyder has also supported Coast Guard public affairs, COMDT (CG-0922), providing releasable social media content, press releases, and strategic support.
- Ms. Snyder serves as webmaster and content developer for four CG Portal intranet sites and two public sites housed on uscg.mil.
- Ms. Snyder has developed numerous templates that aid workforce performance for COMDT (CG-46) including consistent messaging/formatting across process guides, fact sheets, and COMDT (CG-46) presentations. More recently, Ms. Snyder has supported the development of a comprehensive Fuel Management Guide that will assist with manpower performance in the areas of fuel procurement.
- Ms. Snyder helped to develop and support the Coast Guard Energy and Sustainability Community of Practice (ESCoP).
 The ESCoP fosters communication between a variety of professional disciplines to advance energy and sustainability initiatives within the Coast Guard.
- Ms. Snyder served as event planner for two GSA GovEnergy events and two Coast Guard Innovation Expos. GovEnergy required comprehensive event logistics, including oversight of 73 Coast Guard personnel. Both events required exhibiting, graphic development, travel arrangements/logistics, budget management, comprehensive participant outreach, vendor relations, and presentation/training development.



U.S. Navy Chief of Naval Operations Energy and Environmental Readiness Division (OPNAV 45) Washington, DC

Ms. Snyder supported graphic outreach for the Chief of Naval Operations Energy and Environmental Readiness Division (OPNAV45). Her contributions have included annual Earth Day 2011-2014 and Energy Action Month 2012-2014 campaign materials, communications for the Navy's child-focused environmental outreach program, and illustrations for *Currents*, the Navy's award-winning energy and environmental magazine.

U.S. Marine Corps Commandant Marine Corps Safety Division Washington, DC

Ms. Snyder served as graphic lead for the U.S. Marine Corps Headquarters Safety Division outreach and communications program for more than eight years. In this role, she developed comprehensive outreach materials that supported the Warrior Preservation Campaign and Semper Ride programs. Ms. Snyder managed the concept, design, and development of a portfolio of outreach and training materials including: newsletters, templates, training quick guides and brochures, posters, exhibit displays, and web/social media graphics.

California Department of Water Resources Bay Delta Conservation Plan Public Outreach Campaign Sacramento, CA

Ms. Snyder worked with a team supporting the California Department of Water Resources on the Delta Habitat Conservation and Conveyance Program, a program to evaluate alternatives to the Bay Delta Conservation Plan (BDCP) and implement a preferred water conveyance system and habitat conservation measures within the Sacramento-San Joaquin Delta. Ms. Snyder performed graphic support for the public involvement and outreach components for the BDCP. This complex project involved numerous outreach deliverables that have received several communications and creative awards. Components included a Microsoft SharePoint® website, a complex document summarizing the entire plan, multimedia interactive graphics, brochures, newsletters, and presentation graphics.



Society of American Military Engineers 2013 Rocky Mountain Region Joint Engineering Training Symposium Denver, CO

As lead for the symposium's attendee informational materials, Ms. Snyder collaborated with conference leadership and industry partners to develop a comprehensive attendee program. The project required meticulous content organization and review procedures that included more than 46 speakers and 28 industry sponsorships. Ms. Snyder managed complete production and delivery, providing higher-than-anticipated quantities ahead of schedule.

Graphic Design Lead – Various Federal Publications and Reports

Ms. Snyder has provided creative consultation and graphic design support for the following federal reports and publications:

- Frontiers Newsletter a quarterly publication highlighting environmental achievements and initiatives for the U.S. Air Force Space Command (retired).
- Marine Corps Recruiting Depot Energy Master Plan ensures compliance with statutory requirements related to energy.
- Fort A.P. Hill Energy Master Plan mid-range and long-term plan for Fort A.P. Hill to allow them to meet or exceed statutory and Department of Defense requirements.

Outreach Support – Various Projects

Ms. Snyder has served as project design lead on the following public outreach initiatives:

- California High Speed Rail Authority, Fresno to Bakersfield High Speed Train Project
- Denver Water Moffat Collection System Project, Public Involvement Program and Hearings
- Village of Sedalia, Colorado Vision Plan
- Cities of Clovis and Portales, Clovis Portales Microplex Regional Growth Plan

Junior League of Denver Denver, CO

Ms. Snyder served as a marketing and public relations liaison for several Junior League of Denver (JLD) fundraising events. In this role, Ms. Snyder mentored a volunteer team and supported a considerable outreach



campaign surrounding the launch of the JLD's fifth cookbook, *Colorado Classique*. This highly-complex promotion involved branding development, advertising, on-site outreach, public relations, event planning/vendor relations, and sponsorship/attendee solicitation. Specifically, Ms. Snyder developed all visual branding, advertising templates, marketing materials associated with the launch event, a comprehensive sponsorship solicitation, and provided complete event logistics for *Cocktails Classique*, a smaller fund-raising event leading up to the launch of the cookbook. Ms. Snyder also provided key support for numerous on-site tasting/sales events, and authored articles associated with the fundraiser for internal communications.



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