



1. FIRMS GENERAL APPROACH TO PERFORMANCE CONTRACTING

Overview of Approach to energy-savings performance contracting. Provide a stand-alone overview, maximum of 5 pages, using any order or format to present your company as you wish. Include highlights on company background, market sectors served, company strengths and areas of expertise. Also include your general approach to performance contracting: typical phases for a project and ability to support each phase (Project Development, Energy Auditing, Performance/Savings Guarantee, Financing, Construction, Commissioning, Measurement and Verification, Client Staff/Occupant training, Post-Construction Maintenance Support).

Energy Systems Group (**ESG**) is a well-established Energy Service Company (ESCO) with headquarters in Evansville (Newburgh), Indiana, and has been successfully implementing Performance Contracting projects since being established in 1994. ESG's highly qualified team is fully committed to providing State of Connecticut with exceptional design-build, energy-efficiency, innovative technology and carbon footprint management solutions. We have been awarded over 430 energy projects in the U. S. Virgin Islands and in the Midwest, Southeast, Northeast, Mid-Atlantic, and Southwest States with a total value in excess of \$1.3 billion for more than 280 Customers. We have experienced steady growth over the years with many new project opportunities coming to us through "word-of-mouth" promotion — satisfied Customers telling others about our outstanding results and also returning to us themselves for additional phases of work. Our growth and expansion comes as a result of our dedication to project completion — not just with an "on-time and on-budget" mentality — but with a foundational business philosophy and a consistent objective of overachieving to provide exceptional value and results that translate into the highest level of Customer satisfaction and deliver the greatest possible benefits to each of our Customers.

ESG is uniquely qualified to provide the State of Connecticut with a full range of services to meet the project goals. The services include:

- Implementation of a plan to reduce energy and energy related maintenance costs
- Guarantee of energy savings
- Creative solutions including new and renewable technologies
- Alternative financing, (if required in subsequent phases) of all approved cost reduction measures
- Engineering design of the chosen measures
- Construction management of the installed work
- Commissioning of all new equipment installed
- Training of staff in the operation and maintenance of the new equipment
- Maintenance, (as an optional offering) of all newly installed equipment
- Savings monitoring and verification throughout the term of the contract
- Operations and Maintenance processes review and recommendations

ESG has the required expertise in the all aspects of developing, designing, installing, maintaining and verifying ESPC projects. Over the years we have sought out and retained professionals that possess the specific skill sets needed to be considered a viable ESPC partner. ESG staff members have years of field experience in identifying, analyzing, quantifying and implementing energy conservation measures. From the most common ECM's such as lighting, to the more complex such as chiller/boiler replacements, to the innovative measures including solar photovoltaic, ESG has successfully developed and installed it. The ESG Northeast Region team has more than hundred years' worth of combined experience in performance contracting, with expertise in:



- Identifying ESMs, preparing detailed engineering feasibility studies, preliminary plans and specifications, site investigation including analysis of:
 - Existing HVAC
 - Steam, hot- or chilled-water systems
 - Fuel switching
 - Operations and utility costs
 - Load calculations
 - Current system operation practices
 - Maintenance

Among the attributes of **ESG** project performance are excellence in **communications**, unique and creative **ideas**, proven **M&V expertise**, guaranteed **savings optimization**, and a **well-defined project protocol**, established cooperatively with our Customers. From Customers with straightforward energy equipment upgrade needs, to mid- and large-size Customers with more complex facility needs and challenges, to Customers requiring new central energy plants, **ESG** delivers to each the same high quality workmanship, same level of attention, commitment, and effort, with a clear objective to overachieve. **ESG's** client base includes Federal, State, and Local Governments; K-12 Schools; Universities; and Hospitals; with additional Commercial, Industrial, and Institutional clients. **ESG** has built and currently operates four energy centers and works with three landfill gas plants.

A. PROJECT DEVELOPMENT, ENERGY AUDITING

ESG's approach to developing and implementing the Energy Savings Plan will include the following key activities:

- I. Develop a comprehensive energy savings plan;
- II. Build comprehensive scope, detailed design and specification documents to bid the project in line with State of CT/Local Government requirements;
- III. Evaluate and select subcontractors based on the bids, including ensuring adherence to LBE, WBE and MBE, qualification, the best overall value to the State and other key requirements;
- IV. Execute contracts with selected subcontractors (with State input);
- V. Install measures in line with the proposed Energy Savings Plan, scope, design and specifications documents;
- VI. Commission the measures so that the energy savings plan goals are realized;
- VII. Provide training to facilities staff to help optimize the maintenance & operation of the installed measures

The Project Manager (PM), the Lead Engineer, the Account Representative and the Regional Director will serve as **ESG's** primary contacts and representatives for the design-build portions of the project. The Lead Engineer will be the primary contact in the project development phase. He will be responsible for scheduling site surveys, on-site measurements, baseline information gathering and other Activities. A construction manager and/or a project manager will be assigned for construction. The PM will work with the Lead Engineer to develop and finalize the bid documents, help evaluate the bid responses and select the contractors. The PM will be responsible for submitting the initial critical path schedule for the design and construction, developing and executing contracts with the subcontractors, ensuring any applicable MBE requirements, and performing on-site construction management.

B. CONSTRUCTION MANAGEMENT

ESG has refined an approach to construction management that insures benefits provided in this proposal are fully recognized by the CT State/local government customer throughout the construction process.

Some of the specific benefits to be received by the client are as follows:



- Customer will have a single point of responsibility. ESG's Project Manager will coordinate the efforts of all ESG personnel and subcontractors;
- Customer can have selection involvement for suppliers and subcontractors while the performance obligation remains with ESG;
- A guarantee of no change orders other than those authorized by the Customer to expand the scope of work in areas that would further benefit the building occupants;
- Clearly delineated expectations by all parties to insure that the project meets expectations;
- Prompt problem resolution;
- Final commissioning process that ensures functionality

C. PERFORMANCE/SAVINGS GUARANTEE AND MEASUREMENT & VERIFICATION/COMMISSIONING

ESG's core competencies and our company focus are on providing our customers with "Building Upgrades Which Pay for Themselves." A key activity of our partnership with our customers is the measurement and verification of savings results. Our customers have always received timely, accurate and easy to understand documentation of their savings results. ESG's methodologies are in full compliance with those defined in the 2010 IPMVP. The majority of our guarantees are implemented using utility bill comparison-based (i.e., Option C for both Electricity and Fuel) and provide ongoing focus for our customers on operating their facilities in an energy-efficient manner. ESG will evaluate the best protocol based on the goals for State of CT as well as the ESMs installed.

ADJUSTMENT FOR SHORTFALLS AND WINDFALLS

All savings above the project guarantee amount are entirely the customers'. ESG will pay shortfalls on an annual basis. Any shortfall will be reconciled annually by ESG in an amount equal to the shortfall as calculated by the annual energy audit and accepted by customer representatives.

REGULAR INTERVAL POST-INSTALLATION VERIFICATION

At regular intervals, ESG will verify that the installed equipment or systems have been properly maintained and operates correctly. Although annual reports are required for establishing savings guarantees, reports typically are prepared at least semiannually. This ensures systems are working properly, allowing for fine-tuning of measures throughout the year based on operational feedback.

MEASUREMENT AND VERIFICATION OPTIONS

Measurement and Verification guidelines are grouped into four categories: Options A, B, C, and D in line with the latest IPMVP. Having four options provides a range of approaches to determine energy savings with varying levels of uncertainty, cost, and methodology. A particular option is chosen based on the specific project feature. These features include the following: The complexity of the ESMs; magnitude of the estimated savings in comparison to the baseline use; minimizing the risk of savings being achieved; the potential for changes in key factors between the baseline period and the performance period.

ENERGY SAVINGS

Detailed energy-saving calculations are performed to determine the level of savings to be guaranteed. The calculations are performed by system and by ESM. All energy savings are calculated and compared to actual results achieved on similar measures as ESG will guarantee the results.

UTILITY COST AND USAGE FOUNDATION

Utility baseline profiles are utilized to identify potential ESMs and their magnitude. Analysis of the electric demand, electric load factor, electric power usage, and gas usage during peak and lowest usage months provides a wealth of knowledge to the trained eye of ESG's energy engineers. The method utilized for determining energy savings within this project is based on a model that starts with the utility bills (*you cannot save what you do not pay*).



TOTAL BUILDING MODELING:

Based on the specific need, ESG will utilize building modeling software to calculate the impact of more complex and highly interactive measures. ESG utilizes modeling when appropriate. Our experience has shown that spreadsheet based calculations, when properly applied and potential interactions are taken into account, are very accurate. The decision to invest the time and expense to model a facility should always be given careful consideration. Our engineers have utilized several of the different modeling programs such as eQuest, Market Manager, Trane Trace and DOE 2.1 E. Depending on the preference of our customers, ESG will utilize any of the major modeling software.

ENSURING LONG-TERM SAVINGS RESULTS

A proper O & M plan is very important to support long-term energy savings impacts. ESG is exceeding our guaranteed savings results at each of our projects due in part to the excellent job that the in-house facilities personnel are doing maintaining and operating key energy consuming systems. ESG is capable of providing consultative advice, as a minimum, on up to taking total responsibility for HVAC operations and maintenance.

COMMISSIONING

A successful Energy Services Performance Contract process addresses energy-infrastructure requirements of a facility in an integrated manner to ensure that critical building system operational needs are met in the safest, most reliable, and most cost effective manner. This requires a thorough assessment and analysis of all incoming utility services, and existing building systems.

ESG will staff this phase of the project with engineers, commissioning and controls personnel to perform an extensive ASHRAE Level II audit. This extensive knowledge will help to efficiently identify energy savings opportunities. This experience will aid in selecting the most beneficial opportunities to pursue in the commissioning phase.

D. CLIENT STAFF/OCCUPANT TRAINING

ESG has a successful track record of providing valuable technical training and supplements its highly skilled training staff with experienced engineers and project personnel. While some areas of training are standardized, most of the supplied instruction is customized and will be tailored to be directly associated to the conservation measures implemented during construction. ESG will work closely with all key facility operations personnel to deliver educational training and seminars on the operation of their specific ESM's as new assets are being brought on line, and will continue this training during the guarantee and maintenance services phase.

ESG's comprehensive training program includes five (5) major components:

- Customized Maintenance Staff Training And Cross Training
- Energy Cost Reduction Training
- Manufacturer Training
- On-site Training
- AEE training center classes
- Curriculum based programs designed to target staff, students and the community

E. POST CONSTRUCTION MAINTENANCE/SUPPORT

ESG's believes that the initial installation of the project is only a part of the overall initiative when it comes to the operation and financial health of the district over the years. ESG will work with the State of CT/Municipality to tailor a preventive maintenance (PM) program which best matches the needs and goals of the customer site. ESG's only requirement in order to offer long term guaranteed savings is that the equipment be maintained in line with the manufacturer's recommendations. How the PM is performed will be determined by you, the customer. At the request of State of CT/Municipality, ESG can provide these services. Some of our customers want ESG to provide the maintenance services required for the guaranteed savings, as a way to transfer all of the risk of the energy savings



guarantee to the ESCO. In this scenario, ESG will develop a local service branch presence in the State of Connecticut, and will work with you to locate the right services capabilities to meet your needs.

ESG will work with the facility to develop a specific scope of work by equipment type based on the State/Municipality's requirements and goals. The key in any performance contract is that the equipment installed be maintained in line with manufacturers' recommendations. We will work with you to develop a list of qualified, local service providers and then ESG will assist you in soliciting and evaluating bids for service. This approach conserves costs while guaranteeing a local service. Another option would be a comprehensive PM program to consolidate preventive maintenance (PM). ESG could incorporate this option as part of the offering in the Energy Performance Contract.

F. FINANCING

Overall Approach: The essence of our business is that projects pay for themselves through savings, and we are accustomed to structuring the financing so that it is "funded" through savings generated by the project. In some cases, we provide the financing in conjunction with our performance contracts, and then assign to a third-party financial institution our right to receive customer payments. Of course ESG retains all the responsibilities and obligations of being a contractor. This integrated approach, with the financing bundled into the performance contract, works well for certain customers. We are normally able to complete this type of transaction with one board approval, one contract negotiation, one legal opinion and one closing, which makes for a convenient and efficient approach.

In other cases, we assist our customers by helping to arrange the financing, sometimes working with a customer's financial advisor. We routinely conduct financing solicitations with and for our customers, making sure that competition produces the best deal for our customer. ESG has in-house financing expertise that is available to assist customers with project financing as a service.

The Financing: Most of ESG's projects are funded through "private placements" of tax-exempt financing. A number of national and regional banks specialize in this type of lending, and they are familiar with the unique aspects of performance contract financing. Normally single-investor financings, these transactions are often structured as lease-purchase agreements, and sometimes as installment purchase agreements. These financings provide for non-appropriation, meaning the borrower or lessee can terminate the obligation if funds for repayment are not appropriated in a future fiscal year. Since the financing is a "current period" obligation, financing a performance contract generally does not impact a customer's constitutional debt limits. Current rates for ten to fifteen-year tax-exempt financings are approximately 3%. (September 2012)

We sometimes help customers with different types of financing, for example, an energy services agreement or shared savings agreement. These types of transactions would normally be structured to provide for third-party ownership of the project assets. These arrangements are highly customized, and typically require close interaction among the customer, the third party owner and ESG.

Financial Partners: ESG maintains relationships with various financial institutions to provide the best and most appropriate financing for our customers. Bank of America, Capital One, Chase, Green Campus Partners and PNC are some of the institutions we currently work with to offer specialized tax-exempt financing. In addition, ESG works with various investment banks or "bond houses" to be equipped to help customers with financial solutions.

Current Market Conditions: Despite the current challenging economic climate, attractive financing is available for an ESG performance contract. Most of our projects are financed on a tax-exempt basis for terms of ten to twenty years.



2. PROJECT HISTORY

2.1 Related Experience Describe your company's experience with each of the following:

2.1.1 Design, engineering, installation, maintenance and repairs associated with energy-savings performance contracts

Design, Engineering and Development: ESG engineers many decades of experience developing, engineering, designing and managing various ESMs, ranging from lighting upgrades to complex central chiller and heating plants and cogeneration plants for several years. Our engineers are well-versed in established ESMs, such as building envelope upgrades, lighting, water conservation, HVAC controls and mechanical systems, as well as the latest technologies such as lighting emitting diode (LED) application in street lighting (cobra heads as well as decorative lighting).

We are currently installing 11,000 LED cobra heads for the City of Baltimore and are developing LED solutions for another 33,000 street lights for the same client. ESG has expertise in waste utilization, from landfill gas applications to complex waste water treatment plant upgrades. In DeKalb County, GA, ESG engineered converting landfill gas to pipeline quality gas (please refer to <http://biomassmagazine.com/articles/6266/ga-landfill-gas-to-energy-facility-begins-testing-phase> for more details). We are currently replacing six (6) two-stage, turbine pumps, each rated at or above 1500-hp for the Washington Suburban Sanitary Commission (WSSC), in Maryland.

In the Design and Specifications Development Phase, the following Customer inputs need to be provided and the appropriate items below coauthored to enable us to provide the ESG outputs required:

Customer Input	ESG Output
Standards	Defined Scopes and Specifications
Priorities	Cost of Implementation
Maintenance Input	Energy Savings Calculations
Long-Range Plans	Packaged Solutions
	Detailed Scopes and Specifications
	Guaranteed Cost and Guaranteed Savings
	Project Overview and Financing
	Training and Energy Education Meetings
	Verification Meetings

Information sharing will continue throughout the Design and Specifications Development Phase to assure the Customer that we are on track.



Installation: ESG has the best-qualified Project Managers in the Performance Contracting industry. Each member of our Project Management Team has a diverse background in Performance Contracting, energy engineering, construction, and a common objective — Customer Satisfaction. Our Project Managers have OSHA-10 Certifications with many maintaining OSHA-30 Certifications. We offer an experienced goal-directed and process-oriented team committed to delivering a quality project. We have extensive experience in executing projects in highly occupied environments such as residence, dining, and academic/administrative halls. From our experience with a wide range of Customer environments and executed and highly successful projects at three Kentucky Mental Health and Retardation facilities, Department of Correction Facilities, and many other restricted environments, we understand the need to be flexible and meet whatever requirements the Customer may have.

ESG's highly-skilled project managers (PMs) are involved toward the end of the development phase, to assess constructability and for a seamless transition from development to construction. Our project managers work cooperatively with the client and excel in solving problems to meet or exceed client satisfaction. Our PMs have decades of experience managing and building various ESMs, and we have on staff seasoned, certified professionals with PMP¹ and PE² credentials. ESG has an enviable track record of repeat business with many of our clients, attributable largely to the stand-out project management performance of our staff.

Maintenance and Repairs: ESG has a team of seasoned field technicians well versed in maintaining, troubleshooting, operating and repairing significant building systems, such as boilers, chillers, air-handling units, cogeneration and landfill systems. ESG has service centers in various parts of US, including Chicago, Baltimore, Johnson City, TN., and will set up a service operation in Connecticut as part of the envisioned organic growth.

With the vast experience we have in all phases of Performance Contract work (Audit and Assessment forms to design, engineering, implementation, M&V, and long-term support), ESG has developed many "Best Practices" to apply to our methodology. From our knowledge of the major building automation control systems, to our resource-rich library of standardized forms, our well-refined report formats, and the actual building analysis tools we utilize, we have the experience and essential resources to provide comprehensive studies that result in solid baseline energy-use computation.

¹ Project Management Professional

² Professional Engineer

2.1.2 *Conversions to a different energy or fuel source, associated with a comprehensive energy efficiency retrofit*

Fuel switching is one of the measures that ESG regularly considers and evaluates for reducing utility costs. Specific project development examples of fuel switching are many in our history; we provide three specific cases below:

1. Replace oil-fired boilers with gas-fired units at Howard County, MD. The project is one of the referenced projects in this response, with the 1st year M&V actual savings exceeding the guarantee.
2. The same approach as discussed in Item 2 above was included in our response to the Town of Woodbridge, Connecticut. The project is currently under evaluation.
3. Change electric hot-water and steam boilers to natural-gas (NG) fired units, resulting in nearly \$100,000 annual savings at the Depart of Agriculture, MD.

2.1.3 *Post-installation project monitoring, data collection and reporting of savings*

ESG has been performing EPC projects since 1994 and providing post-installation monitoring, utility and field data collection, and compiling M&V reports on realized savings. ESG's engineers are well-versed in IPMVP protocols, and our M&V plan and sampling plans follow the IPMVP Guidelines. We monitor the energy savings periodically (typically quarterly or semi-annually), and provide the M&V report annually. The periodic monitoring of data (either using the building automation system, or through short-term logging of key assets) in conjunction with the utility bills, helps evaluate the energy savings trend for the reporting period.

As part of the large pump upgrades project for WSSC, ESG is currently in the process of setting up a web site that displays energy savings, calculated in line with the M&V methodology in the contract. The data input to the M&V calculations are from field measurement devices, such as kWh meters, pressure and flow sensors, all part of the SCADA system for the plant. With the web site setup, WSSC can access savings data for durations of a year to a month.

In summary, ESG practices Monitoring and Verification utilizing the latest industry-accepted, internationally developed protocols. We are pleased to work closely with our Customers to evaluate and determine the most appropriate M&V approach to incorporate in our projects. We have a dedicated staff of M&V specialists professionally certified in the process and ready to serve our Customers.

2.1.4 *Overall project management and qualifications*

ESG has refined an approach to project management that insures benefits indicated in this proposal are fully recognized by the facility throughout the construction process. Some of the specific benefits to be received by the building occupants are as follows:

- The client team will have a single point of contact; ESG's Project Manager will coordinate the efforts of all ESG personnel and subcontractors;
- The client team can have selection involvement for suppliers and subcontractors while the performance obligation remains with ESG;
- A guarantee of no change orders other than those authorized by the client to expand the scope of work in areas that would further benefit the State;
- Clearly delineated expectations by all parties to insure that the project meets expectations;
- Prompt problem resolution;
- Final commissioning process that ensures functionality

ESG's Project Managers understand that their role is to deliver projects on time while meeting or exceeding the expectations of the client. More importantly they understand that most clients have never entered into an agreement like an Energy Performance Contract and usually do so as a result of trust. Trust in ESG is solidified by contract to perform and will never be comprised. Our entire team cherishes the trust and confidence in performance that the State may choose to place with us and will exert every effort to demonstrate that this decision was beneficial to the State's constituents.

ESG has the best-qualified Project Managers in the Performance Contracting industry. Each member of our Project Management Team has a diverse background in Performance Contracting, energy engineering, construction, and a common objective — *Customer Satisfaction*. We offer an experienced goal-directed and process-oriented team committed to delivering a quality project. One of the key elements to the success of a Performance Contract is frequent and excellent communication; therefore, we will provide a single point of contact for all aspects of each project and communicate directly with on-site staff to assure our commitment to Customer satisfaction.

A key to consistent delivery of our systems and services is our attention to project management. Projects for the State will likely vary and have diverse scope and magnitude. At ESG, our Project Manager provides a single focal point for all contracts with responsibility for the implementation phase of the project. The ESG Project Manager(s) will work closely with the on-site designated representatives from the State.

2.1.5 *Securing long-term financing*

Financing is a critical aspect of the Performance Contracts provided by Energy Systems Group (ESG) and our objective is always to make it easy and cost-effective for our Customers to acquire the proper solution.

For transactions like this [or alternatively, For Customers like XYZ School Corporation], we typically provide the financing in conjunction with our Performance Contracts, usually in the form of a tax-exempt lease-purchase or an installment purchase agreement. We normally assign to a third-party financial institution our right to receive customer payments; however, of course, ESG retains all the responsibilities and obligations of being a contractor. We have found this approach to financing to be the best in most cases for two primary reasons:

- Our Customers only need to enter into one set of agreements, not multiple contracts. This makes completing a transaction easier for our Customer, and helps keep delays to a minimum.
- By maintaining relationships with multiple financial institutions, we are able to insure that we are providing the most attractive and most appropriate financing terms and conditions for each Customer.

We also have the ability to develop and recommend other financing arrangements for our Customers including bond financing. We have dedicated in-house financing expertise and we look forward to working with you to fully address your financing needs and requirements in this project.

2.1.6 *Financial stability*

Energy Systems Group (ESG) became profitable in its fifth month of operation and has remained profitable ever since. We have managed to stay profitable by controlling growth and maintaining focus on satisfying Customers through Performance Contracting.

Our growth and expansion comes as a result of our dedication to project completion — not just with an “on-time and on-budget” mentality, but with a foundational business philosophy and a consistent objective of overachieving to provide exceptional value and results that translate into the highest level of customer satisfaction and deliver the greatest possible benefits to each of our Customers.

ESG, involved in Performance Contracting since being established in 1994, has been awarded and developed more than \$950 million in Energy Performance Contracting projects for building owners throughout the Midwest, Southeast, Mid-Atlantic, and Rocky Mountain States for more than 255 Customers.

“We want Customers enthralled and ecstatic with our performance, and unless we are doing this, we are not accomplishing what we hope to do.”

*Jim Adams
President (retd.) and Founder of ESG*



ESG Consistently Performs at Award-Winning Levels.

ESG is a \$150+ million per year company specializing in Energy Savings Performance Contracting serving a primary Client base that includes Federal, State, and Local Governments; K-12 Schools; Universities; and Hospitals; with additional clients that include Commercial, Industrial, and Institutional Customers. **ESG** built and operates four energy centers and works with three landfill gas plants.

Performance Contracting is ESG's Only Focus.

ESG is prequalified for bonding capacity with the support of our parent companies. Our parent company fully supports our efforts and obligations to Customers through performance bonds, letters of credit or similar financial instruments, and through access to many specialty services listed in this response in other sections.

Additional information supporting the financial soundness and stability of **ESG** can be found in Section 3.2 A copy of **ESG**'s audited financials and a sample of our Certificate of Insurance are also included at the end of this section.

ESG is a well-established Energy Service Company (ESCO). We have experienced steady growth over the years with many new project opportunities coming to us through "word-of-mouth" promotion – satisfied Customers telling others about our outstanding results and also returning to us themselves for additional phases of work. Since 1994, **ESG** has implemented over **\$1.3 billion** in projects for more than 280 customers throughout the United States and U.S. Virgin Islands.

Below is a table listing ESG's annual contract and revenue values since our start-up in 1994.

	<u>Contract Values</u>	<u>Number of Contracts</u>	<u>Revenue Amount</u>
2011	\$122,288,782	51	\$161,847,336
2010	\$188,330,257	82	\$146,870,899
2009	\$128,547,352	63	\$121,270,729
2008	\$130,403,824	49	\$118,640,810
2007	\$119,972,213	40	\$122,763,224
2006	\$143,218,397	21	\$100,436,040
2005	\$93,513,228	31	\$64,698,171
2004	\$58,385,810	23	\$62,115,390
2003	\$50,792,122	17	\$54,034,440
2002	\$72,037,162	14	\$43,052,073
2001	\$62,625,233	21	\$48,780,486
2000	\$78,681,277	16	\$41,306,157
1999	\$24,834,700	19	\$27,959,049
1998	\$18,174,478	12	\$21,003,117
1997	\$18,819,998	5	\$10,429,408
1996	\$4,264,890	7	\$27,216,897
1995	\$44,907,853	11	\$20,926,654
1994	\$1,664,502	1	\$0
	\$1,361,462,078	483	\$1,193,350,880

2.1.7 *Projects of similar size and scope*

ESG has performed projects ranging from about \$500,000 to over \$50 million with State, local, federal and municipal government entities. We have performed several projects utilizing a contracting mechanism similar to what the State of Connecticut is initiating through this RFQ. For example, we have successfully completed higher education campus for a state university, office buildings and detention center for local counties, several office and maintenance buildings for state agencies, street lighting for City government and a pumping station upgrade for a quasi-government entity. ESG is ready, willing and able to perform similar services to the State of Connecticut, local and municipal governments.

2.1.8 *In-state projects and Connecticut-based subcontractors*

ESG responded to the Town of Woodbridge (CT) RFP for an energy performance contract at Beecher Road School. ESG utilized local contractors in its response to the Town and the proposal is currently being evaluated. ESG's team included the local:

- HVAC controls contractor (Johnson Goodyer),
- Mechanical contractor (EMCOR - New England Mechanical)
- MEP firm (AKF Group professional services firm providing engineering, commissioning, testing, technology, sustainability and lighting design services)
- Photovoltaic (PV) - Ross Solar Group
- Infrared Imaging (Thermal Boundary) – 4 Elements Group

2.1.9 *United States Department of Energy programs*

One of Energy Systems Group's (ESG) founding missions is a "Commitment to create and implement solutions that preserve and improve the environment in which we all live and work." With this guiding principle, ESG has sought out organizations and collaborative groups that promote energy efficiency, sustainable development, and renewable applications for Customers in our market, which includes public and private K-12 school systems, higher education facilities, healthcare providers, municipal governments, state agencies, and federal government organizations.

ESG and our employees are very active and well represented in a variety of professional organizations that support, recognize, or otherwise have a link to energy engineering, energy efficiency, Energy Savings Performance Contracting, and Energy Service Companies (ESCOs). Our efforts with the **Department of Energy's** Federal Energy Management Program and Federal Utilities Partnership Working Group; Environmental Protection Agency's ENERGY STAR Building Partnership Program and Landfill Methane Outreach Partnership; U.S. Green Building Council's LEED program; Association of Energy Engineers Certification Programs; and Energy Services Coalition's regional energy efficiency projects are a testament to the determination of ESG to develop and implement projects that not only improve Customer facilities but also fit with the collaborative efforts of regional and national groups to make significant enhancements to the energy and environment of our country.

As a testament to our skills and capabilities, Energy Systems Group has been prequalified by the Departments of Energy and Defense to perform Energy Savings Performance Contracts (ESPCs), http://www1.eere.energy.gov/femp/pdfs/doe_ql.pdf

- ESG had the distinction of being selected as one of five Energy Service Companies to use performance-based contracts to reduce energy use, manage utility costs, and promote renewable energy at federal facilities by using Biomass and Alternative Methane Fuels (Contract # DE-AM26-02NT41456). The Department of Energy retired this license as of January 2009.
- ESG engaged under this contract vehicle with the USDA Forest Service at all of their Region-2 and Region-4 facilities. This project addressed USFS facilities in Colorado, Wyoming, South Dakota, Nebraska, Utah, Idaho, and Nevada. Each of the over 20 National Forests is using ESPC to implement onsite Renewable Energy Generation in combination with traditional energy and water conservation ECMs.
- ESG is the ESCo of choice for several Public Utilities to develop, design, implement and operate Utility Energy Services Contracts (UESC) to reduce energy use, manage utility costs, and promote renewable energy at federal facilities.



DEPARTMENT OF ENERGY'S QUALIFIED LIST OF ENERGY SERVICE COMPANIES

July 2012

DEI Consulting	Mr Fariborz Amir Malek PE President	2941 Fairview Park Dr, Ste 630 Falls Church, VA 22042	P: 703-205-0775 F: 703-205-0774	E-mail: amalek@dei-consulting.com Web site: www.dei-consulting.com
DTE Biomass Energy, Inc.	Mr Michael Kotyk Vice President - Business Development	425 S Main St Suite 201 Ann Arbor, MI 48104	P: 734-913-2286	E-mail: kotyk@dteenergy.com Web site: www.dteenergy.com
Eaton Corporation	Carl Lundstrom Federal Business Contracts Manager	4550 North Point Parkway Alpharetta, GA 30022	P: 678-254-1221	E-mail: CarlLundstrom@Eaton.com Web site: www.eaton.com
EMCOR Energy Services	Mr Paul David Vice President – Professional Services	505 Sansome Street Suite 1600 San Francisco, CA 94111	P: 415-434-2600 F: 415-434-2321	E-mail: paul_david@emcorgroup.com Web site: www.emcorgroup.com
Energy Services Group by Honeywell (ESG)	Scott Schroeder Manager	MN10-181A 1985 Douglas Drive N Golden Valley, MN 55422	P: 763-954-5442 F: 763-954-5456	E-mail: scott.schroeder@honeywell.com Web site: www.lesg.com
Energy Systems Group, LLC	Kevin Johnson Director, Utility and Federal Accounts	4655 Rosebud Lane Newburgh, IN 47630	P: 919-818-9407 F: 812-492-8366	E-mail: kjohnson@energysystemsgroup.com Web site: www.energysystemsgroup.com
EnerPath Services, Inc.	Mr Stephen Guthrie CEO	1758 Orange Tree Lane Redlands, CA 92374	P: 909-335-1699 F: 909-335-5715	E-mail: Stephen@enerpath.com Web site: www.enerpath.com
Ennovate Corporation	Ms Dana Chaves Business Development Specialist	10650 E. Bethany Dr. Suite A Aurora, CO 80014	P: 303-309-6223 ext. 102 F: 303-309-6228	E-mail: Dana.Chaves@energyexpertise.com Web site: www.energyexpertise.com
Entech Sales & Services, Inc.	Mr Scott Rankert Vice President	3404 Garden Brook Dr Dallas, TX 75234	P: 469-522-6000 F: 972-243-1774	E-mail: scott.rankert@entechsales.com Web site: www.entechsales.com
Environmental Chemical Corporation	Mr Joseph Koizen Manager for Sustainability and Energy Ventures	9830 Colonnade Center Suite 240 San Antonio, TX 78230	P: 916-316-4864	E-mail: JKoizen@ecc.net Web site: www.ecc.net
ESSCO Electric, Inc.	Mr Gerald (Jerry) Bewlay President	1866 Alder Avenue Richland, WA 99352-0123	P: 509-366-2491 F: 509-943-1549	E-mail: esscoelectric@gmail.com Web site: www.necanet.org
Facility Solutions Group (FSG)	Mr Bernard Erickson Division Manager	224 Washington St Perth Amboy, NJ 08862	P: 732-826-6100 F: 732-826-6540	E-mail: bernie.erickson@fsg.com Web site: www.fsg.com
FMS Lighting Management Systems, Inc.	Mr William Kelly Jr President	323 Commerce Park Dr Jackson, MS 39286-0162	P: 601-362-1533 F: 601-981-7505	E-mail: wkelly@fmslighting.com Web site: www.fmslighting.com
Four Seasons Environmental	Mr Daniel Tarkington PE Chief Executive Officer	43 New Garver Rd Monroe, OH 45050-1243	P: 513-539-2978 F: 513-539-2972	E-mail: dtarkington@fseinc.net Web site: www.fseinc.net

ESG is a dynamic, profitable, and expanding energy services provider — large enough to handle extremely large dollar volume and complex, comprehensive scope projects — yet small enough to maintain direct lines of communication and access for our Customers to every level of corporate management including Greg Collins, our President, and to provide an exceptional degree of virtually “bureaucracy-free” interaction with our Customers.

2.1.10 Professional Certifications

ESG is very proud of our professional staff and the experience that they provide to our Customers. With over 240 employees living and working throughout 39 states and in the U. S. Virgin Islands, we have proven ourselves capable and extraordinarily adept at providing results that delight our Customers, that raise the “performance bar” for our industry, and that win critical acclaim, recognition, and awards.

Our employees are highly motivated individuals with a wealth of knowledge and experience in all aspects of facility systems performance and energy and water conservation technologies. Active participation in professional organizations that support, recognize, or otherwise have a link to energy engineering, energy efficiency, Energy Savings Performance Contracting (ESPC), and Energy Service Companies (ESCOs), keeps our staff of engineers, technicians, and project support personnel up to date on the latest trends and developments in the energy industry.

This table provides an example of our areas of expertise and the number of **ESG** staff with this expertise.

Doctorates	4	Juris Doctorates	2
Master's Degrees	31	Bachelor's Degrees	111
Associate's Degrees	16	Certified Public Accountants	3
25 Professional Engineers (PEs) Licensed in 20 States and the Virgin Islands With 9 Engineers-in-Training			
Engineers: Performance Contract / Energy / M&V / Project			38
and 3 Engineering Interns			
Project and Construction Managers / Plant Managers / Specialists			42
Operations Directors and Managers			5
Energy Coaches and Managers / Building Consultants			4
Maintenance and Technical Specialists / Resource Managers			35
CEM (Certified Energy Manager)			38



USGBC LEED Accredited Professional	14
CMVP (Certified Measurement and Verification Professional)	9
GBE (Certified Green Building Engineer)	5
CRM (Carbon Reduction Management)	2
DGCP (Distributed Generation and Cogeneration Professional)	1
CREP (Certified Renewable Energy Professional)	1
CEP (Certified Energy Procurement)	1
CVE (Certified Value Engineer)	1
CLEP (Certified Lighting Efficiency Professional)	3
CIAQP (Certified Indoor Air Quality Professional)	2
CBC (Certified Building Contractor)	1
CEA (Certified Energy Auditor)	4
CDSM (Certified Demand Side Manager)	5
CSDP (Certified Sustainable Development Professional)	3
CBCP (Certified Building Commissioning Professional)	2
BEMP (Business Energy Management Professional)	2
PMP (Project Management Professional)	6
CAPM (Certified Associate in Project Management)	1
CQM (Certified Construction Quality Manager)	2

2.2 Market Section Involvement. Describe your company’s expertise in each of the following market sectors and facility types:

2.2.1 State Agencies:

ESG has developed and implemented over 40 energy projects at a total value in excess of \$149 million in 11 states ranging from \$149,000 to \$21.3 million with eight Customers implementing additional phases since 1996.

2.2.2 Boards of Education:

ESG has developed and implemented over 118 energy projects at various Boards of Education at a total value in excess of \$373 million in eleven states ranging from \$23,000 to \$48.1 million with sixteen Customers implementing additional phases since 1994.

2.2.3 Higher education institutions – universities, colleges, and community colleges:

ESG has developed and implemented over 50 energy projects at a total value in excess of \$185 million in nine states ranging from \$90,000 to \$21.3 million with ten customers implementing additional phases since 1995.

2.2.4 *Municipalities with population between 100,000 and 150,000:*

ESG has developed and implemented over 20 energy projects at a total value in excess of \$54 million in eight states ranging from \$115,000 to \$10.8 million with five Customers implementing additional phases since 1997.

2.2.5 *Municipalities with population under 100,000 population*

ESG has developed and implemented over 20 energy projects at a total value in excess of \$41.9 million in eight states ranging from \$112,000 to \$7.8 million with four Customers implementing additional phases since 1998.

2.2.6 *Specific government building types – K-12 school buildings, correctional facilities, hospitals, laboratories, dormitories, office buildings, recreational centers, libraries, and multi-family buildings*

ESG engineers have developed projects in various types of buildings for different clients, listed above. The building and space types included, K-12 schools, associated classrooms, laboratories, libraries, cafeteria and gymnasium; correctional facilities, including detention centers, and associated cells, cell blocks, cafeteria, kitchen, laundry, offices, and other spaces; hospitals and health centers; research buildings, with laboratory as the predominant space type; higher education institutions with associated classrooms, laboratories, gymnasium, dormitories, and libraries; multi-family buildings, including high- and low-rise units. We have provided below some of the unique elements from some of our past projects.

ESG has developed and implemented numerous energy projects for government entities that included recreation centers, library districts, and swimming pools.

K-12 School Buildings

Just one example is a K-12 project ESG partnered with Independence School District in Independence, Missouri, to improve the stadium lighting and installed field turf on football fields at two of the School District's High Schools, which included drainage, preparation, and installation of the field turf. This project also included a complete renovation of a natatorium, which included pool HVAC improvements, pool area work (deck, painting, diving, and starting equipment), pool common area work (doors, floor, and ceiling replacement), and pit drain repair.



Multifamily buildings – high-rise or large buildings:

ESG has developed and implemented energy projects for Customers that have included multifamily buildings. Just one example of this type of project is a project ESG developed and implemented for the Indianapolis Housing Authority, which offers 11 unique communities throughout Marion County in Indianapolis, Indiana, tailored to the lifestyle needs of seniors and families. The project involved 3 buildings (Barton Tower, Barton

Annex, and Lugar Tower) including approximately 1,147,100 Square Feet. The Energy Conservation Measures implemented including lighting replacement/retrofit of all space lighting and upgrades to emergency and exit lighting; HVAC system improvements including upgrades to existing units to improve energy efficiency, new pumping and delivery system, upgraded HVAC temperature controls, and new domestic hot water heaters; and steam system improvements including new high efficiency boilers and improvements to steam piping. This \$3.8 Million project provided guaranteed of energy savings worth \$2,664,000 over 12 years.

Multifamily buildings – smaller scale multiplex buildings:

ESG has developed and implemented energy projects for Customers that have included multifamily buildings. An example of this type of project was the installation of Ground Coupled Heat Pump (GCHP) units for 1,200 Family Housing Units totaling approximately 1,440,000 square feet at Cherry Point Marine Corps Air in Havelock, North Carolina. This project also required that ESG install air-to-air units in several housing units where GCHP units were determined to be incompatible due to environmental concerns and / or existing architectural constraints.

Another example of this type of project is the work ESG performed for, Westminster Village North, Inc., a complete retirement living facility providing facilities from private homes and apartments to assisted-living apartments, to around-the-clock nursing care, to dementia care. The energy conservation measures implemented included lighting retrofits across campus, zone-line valves, multizone unit controls, boiler installation and controls, replacing electric with gas dryers in the laundry, and insulation. This \$ 386,587 project provided guaranteed energy savings worth \$ 385,960 and operational savings worth \$ 71,440 over ten years.

Community-wide efforts

An example of a project ESG has developed and implemented involving community-wide efforts is a project where we partnered with the City of Darien, located in the Chicago area. This project included updating their Community Center, which was a 1970's style open-plan elementary school building they had purchased from a local community school district with plans to convert into the new Center designed to provide a variety of programs serving all demographics of the Darien community, from the very young to the growing senior segment. A significant area of this project involved their Darien SportsPlex, an existing Park District facility that housed two indoor soccer fields and two ice rinks. ESG worked with the Customer on the design and construction of converting one soccer field into a third ice rink.

2.2.7 Other non-buildings, including but not limited to wastewater treatment facilities, water meter projects, traffic signals, and street lights

Please refer to our previous response for non-building types, such as indoor soccer fields and ice rink. In addition to the above examples, ESG has developed and implemented over 20 non-building projects totaling over \$90.7 Million for over 15 Customers that have included wastewater treatment facilities, water meter projects, traffic signals, and street lights.

One example of this type of project is a \$6.6 Million Citywide LED Traffic Signal Retrofit project that ESG developed and implemented for the City of Baltimore, Maryland, in 2006. This project included an audit that surveyed over 1,370 intersections and some 45,000+ lights in just four short weeks. The scope of work included replacing more than 35,000 existing incandescent traffic lights (red, amber, green, arrows, and pedestrian crossings) with energy efficient LED lights and the completed project provided a guaranteed energy savings of \$ 8,980,990 over a ten-year period. For this project, ESG provided engineering, design, project management, financing, and guaranteed energy savings. Subcontractors were involved in the installation of the energy conservation measures. In 2011, the City of Baltimore contracted with ESG again for over \$14 Million to upgrade their outdoor cobra head lights with LED replacement fixtures, which would save the City over \$1.7 Million a year.

ESG partnered with the City of Bloomington, Indiana, in a \$ 2,371,493 Phase 3 contract to provide upgrades for their wastewater treatment plant that included fine bubble diffuser retrofits to four aeration basins and one digester basin; structural modifications to aerobic digesters; new exterior lighting fixtures (60), and a new high efficiency 600-horsepower blower. This Wastewater treatment plant project would provide the city with a guaranteed savings of \$1,542,970 over a 10-year period. The project also provided a HVAC electric-to-gas conversion including replacement of makeup air units with 12,500 cfm gas-fired rooftop unit.

In 2010, ESG implemented a \$ 3.4 million AMI project with the City of Snyder, Texas. The main focus of this project was implementation of an automated metering infrastructure (AMI) - Fixed Base System to replace the City's current water meters. ESG replaced 5,000 meters including residential and commercial meters. As part of the AMI metering system, ESG has provided a meter maintenance program for a portion of the meters for five (5) years. Within the scope of this program, ESG will replace the Utility Metering Element (UME) within a number of the larger meters each year. The replacement of the UME in the meter will maintain the meter at peak efficiency. In addition, this will add an additional year to the meter warranties. ESG provided engineering, design, project management, and guaranteed energy savings. The project also included lighting upgrades in four city buildings, the wastewater treatment plant, and landfill; minor HVAC improvements in City Hall; a new roof for one fire station; and a new SCADA controls system at the wastewater treatment plant, and provides a guaranteed energy and water/sewer and operational savings of \$4,057,395 over a 15-year period.

Currently ESG is installing six large water pumps for the Washington Suburban Sanitary Commission (WSSC). The \$5.7 million project includes rehabilitating five, 1500-hp vertical turbine and one 2000-hp horizontal turbine pumps and reconditioning the synchronous electric motors. The 15-year term is expected to yield over \$10 million in guaranteed savings. ESG supervised and managed the entire development, including baseline development, engineering, design, project management, and guaranteed energy savings.

2.3 Project List. *List all energy performance contracts that your firm or personnel have managed within the last five years.*

The Energy Systems Group team is very versed and experienced in several market sectors including: K-12 Schools, Local Municipalities, State Government, Healthcare facilities, Universities, and Community Colleges. Within each of these market sectors our account teams deploy cutting-edge technologies that reduce energy costs and address the core needs of the Customer. Our Customer's needs tend to be primarily HVAC related but the demands of being environmentally conscious means we are implementing more renewable energy and "green" solutions within all market sectors.

Our written response provides insight into who ESG is as a company, our work ethic, our integrity, our determination, and our company "personality." It is an important gauge of our merit to serve as your energy efficiency service provider. Our project resumes span the range of Energy Conservation Measures (ESMs). From basic lighting and controls to sophisticated cogeneration central utility plants, ESG has been successful in implementing customized projects of all sizes — we are nationally recognized as delivering superior quality projects that exceed client expectation for performance!

Many ESG clients enter into multiple phase projects with us. Multiple procurements are important as they are a key indicator of the level of client satisfaction achieved during the construction stage. Keeping these clients delighted through the ongoing services phase is equally as important as it demonstrates our commitment to the overall success of a program. We can provide details for each of the projects listed on the attached sheet upon request. ESG has a complete resume and experience in evaluating and implementing a diverse range of upgrades and believes these projects highlight those abilities.

Provided on the following page is a truncated list of all Guaranteed Energy Savings Performance Contract projects that ESG has implemented within the last five years.



RESPONSE TO DAS COMBINED REQUEST FOR QUALIFICATIONS AND REQUEST FOR PROPOSALS
12PSX0153 - SEEKING TO QUALIFY ENERGY SERVICE PROVIDERS

Energy Systems Group Projects Completed in Last Five Years

Customer/Project Name	State	City	Year Completed	Contract Total
Conway, City of	AR	Conway	2009	\$ 847,463
Hollywood, City of	FL	Hollywood	2012	\$ 1,354,164
Leon County	FL	Tallahassee	2010	\$ 4,315,719
Leon County, Phase III	FL	Leon County	2011	\$443,033
Marion County Public Schools	FL	Ocala	2008	\$ 2,054,467
Orlando Sanford International Airport	FL	Sanford	2009	\$ 3,519,322
Pinellas County Schools - Phase 1- Walter Pownell Facility	FL	Largo	2008	\$ 2,090,500
Pinellas Co School Board - Phase 6 - Lighting - Ltg&Wtr P2	FL	Largo	2011	\$ 6,734,151
St. Petersburg College	FL	St Petersburg	2012	\$ 3,765,920
Clark Atlanta University - Phase 1	GA	Atlanta	2008	\$ 11,782,024
Clark Atlanta University - Phase 2	GA	Atlanta	2008	\$ 3,838,577
Muscogee County School District	GA	Muscogee	2007	\$ 6,577,366
Sumter County School District - Phase 1	GA	Americus	2007	\$ 993,384
Sumter County School District - Phase 2	GA	Americus	2008	\$ 155,405
Cambridge Community Unit School District 227	IL	Cambridge	2009	\$ 159,849
Champaign Community Unit School District 4	IL	Champaign	2009	\$ 2,757,873
Chicago Theatre	IL	Chicago	2009	\$ 220,192
Darien Park District	IL	Darien	2008	\$ 7,822,538
East St Louis School Distirct 189 - Phase 1- additional	IL	East St Louis	2006	\$ 525,100
East St Louis School District 189 - Phase 1	IL	East St Louis	2006	\$ 3,929,028
East St Louis Schools - Phase 2	IL	East St Louis	2007	\$ 228,150
Gallatin Community Unit School District No. 7	IL	Junction	2008	\$ 824,618
Gibson City-Melvin-Sibley CUSD 5	IL	Champaign	2007	\$ 733,300
Governors State University	IL	Chicago	2011	\$ 8,269,000
Hiawatha Community School District 426	IL	Kirkland	2008	\$ 3,679,282
Knox College	IL	Galesburg	2007	\$ 2,447,728
Knoxville Community Unit School District 202	IL	Knoxville	2008	\$ 4,206,295
LaSalle Foundation	IL	Chicago, City of	2008	\$ 159,101
Leland Community Unit School District No. 1	IL	Leland	2008	\$ 2,519,942
Lincoln Elementary School District 156 - Phase I	IL	Calumet City	2009	\$ 794,300
Northern Illinois University - Phase 10a	IL	DeKalb	2010	\$ 1,424,472
Clinton Central School Corporation	IN	Michigantown	2006	\$ 3,024,619
Evansville Department of Parks and Recreation, City of	IN	Evansville	2011	\$ 1,096,403
Evansville-Vanderburgh County School Corporation - Phase 3	IN	Evansville	2011	\$ 5,470,180
Evansville-Vanderburgh County School Corporation - Phase 3 ADD	IN	Evansville	2011	\$ 4,722,382
Hooverwood Long-Term Care Facility	IN	Indianapolis	2008	\$ 2,818,725
Indiana University Southeast	IN	New Albany	2008	\$ 1,160,135
Indiana-Purdue University - Fort Wayne - Phase 2	IN	Fort Wayne	2008	\$ 357,300
Switzerland County School Corporation	IN	Vevay	2010	\$ 1,014,630
Tipton County Courthouse	IN	Tipton	2008	\$ 1,480,104
University of Southern Indiana	IN	Evansville	2009	\$ 276,440
Vigo County Public Library	IN	Terre Haute	2011	\$ 653,000
Vigo County School Corporation - Phase 6	IN	Terre Haute	2010	\$ 4,082,089
Whiting, City of	IN	Whiting	2009	\$ 963,377
Evansville Parking Garage	IN	Evansville	2012	\$ 345,000
Boone County Fiscal Court Kentucky	KY	Boone County	2010	\$1,323,001
Central State Hospital	KY	Louisville	2008	\$ 906,050
Covington, City of -- Phase I	KY	Covington	2008	\$ 2,254,211
Hazelwood Intermediate Care Facility	KY	Louisville	2008	\$ 1,109,400
KCTCS - Phase 2 - Bluegrass	KY	Lexington, Danville, and Lawrenceburg	2007	\$ 796,360
KCTCS - Phase 2 - Elizabethtown	KY	Elizabethtown	2008	\$ 585,014
KCTCS - Phase 2 - Owensboro	KY	Owensboro	2008	\$ 1,341,267
Kenton County School District	KY	Fort Wright	2009	\$ 3,779,786
Baltimore, City of - LED Project	MD	Baltimore	2008	\$ 6,372,799
Baltimore, City of - Schools (O&M Amt was \$28M)	MD	Baltimore	2008	\$ 48,128,591
Howard County Government - Phase I	MD	Howard County	2011	\$ 4,381,443
Howard County Government - Phase II	MD	Howard County	2011	\$ 1,095,227
Maryland, State of - Maryland Armories Phase 1 - Department of Military	MD	16 Across the State	2007	\$ 1,334,868
Parking Authority of Baltimore City (PABC) Note \$2,052,358 or PM Services and M&V	MD	Baltimore	2011	\$ 4,758,560
University of Baltimore Phase 1 (\$7.7M for Management Services)	MD	Baltimore	2011	\$ 15,755,684
Wicomico County Government	MD	Salisbury	2012	\$ 1,192,088

Since ESG has operated under our current name and corporate structure, we do not have any additional “other projects” deemed relevant to submit.

2.4 Project References. *Provided detailed information on energy-savings performance contract projects your company completed that can be used for references. Expand on the information provided in the previous section to give details on individual projects. Include the following information on each project as a minimum:*

- 2.4.1 *Project Identification: Owner name, city/state, facility type (hospital, school, college, city, county, etc.).*
- 2.4.2 *Contact Information: Names and contact information of owner(s) representatives who can serve as references.*
- 2.4.3 *Project Type: Energy-savings performance contract or other type.*
- 2.4.4 *Project Size: Number of buildings and total project square footage.*
- 2.4.5 *Project Dollar Amount: Total contract amount and the total project capital expenditure amount.*
- 2.4.6 *Source of Funding: A description of the source of funding used for the project and the company’s role (if any) in securing that funding.*
- 2.4.7 *Project Dates: Actual dates of audit start and acceptance; Actual construction starting and ending dates.*
- 2.4.8 *Contract terms: A description of the type of contract, financing arrangement, and contract term.*
- 2.4.9 *Project Personnel: A list of the name(s) of individuals involved in the project, their role(s) and if these personnel will be assigned to Connecticut ESPCP projects.*
- 2.4.10 *Project Schedule: Indicate if project was completed on schedule and an explanation if not.*
- 2.4.11 *List of Improvements: The types of retrofits and operational improvements implemented related to energy, water and other cost savings.*
- 2.4.12 *Project Performance: The amounts of projected annual savings, guaranteed annual savings, and actual annual savings for each project in a table*
- 2.4.13 *Measurement and Verification (M&V): A brief description of the M&V approach for each project including which savings were stipulated, if any.*
- 2.4.14 *Performance Guarantee: A description of the savings guarantee for each project and, if the guaranteed savings were not achieved, how the company compensated the entity that contracted for energy-savings performance contract services for any annual shortfall (e.g. pay funds to meet the guarantee, etc.).*
- 2.4.15 *Additional Comments: Comments on any special features, services, conditions, creative approaches, special needs of customer, etc. that may be relevant to the ESPCP and clientele.*

ESG is not limited by the need to provide customers with a specific product line. We bring alternatives to our customers and then jointly decide what is the best solution to their needs. Furthermore, we recognize that project design and development is not a simple linear process. Every project has its unexpected problems. We pride ourselves on our creativity and ability to work through whatever problems may arise.



Provided on the following pages are three (3) detailed “Project History and Client Reference Forms” for select projects for Customers with either similar types of facilities or needs that were performed by the ESG Team dedicated to the implementation of your project. The projects we have selected to that are also examples of varying project complexities and demonstrate and document ESG's extensive project experience, Customer satisfaction, and our ability to serve the Town of Woodbridge. The Customers and projects presented here were selected because they demonstrate the wide range of expertise and experience of Team Members highlighted in Section 3.0, Qualifications for involvement with the Beecher Road School Project.

We have provided the information required in the RFP including: Project identification, type, size, dollar amount, personnel, and performance; ESMs installed; contract funding and terms; energy savings, and contact information for client reference. We will be happy to provide any additional information that you require upon request.

ESG believes that our project experience speaks for itself!
Our energy savings experience is second to none!



PROJECT HISTORY AND CLIENT REFERENCE FORM

Project Name and Location; Number of Buildings; Primary Use; Total Square Footage	Howard County Government; Ellicott City, MD; Seven (7) buildings; County Government Bldgs., 576,518 square footage
Project Dollar Amount (installed project costs); Source of Project Financing	\$5,495,227; loan secured by Howard County Government
Primary ESMs Installed; ESCO Services Provided	A comprehensive package of energy conservation measure was developed to implement lighting upgrade, building automation, building envelope improvements, window film, new boilers, new chillers, intelli-hood controls, energy management system upgrades, solar photovoltaic, daylight harvesting and a green roof.
Construction Start & End Dates	June 2009 – February 2011
Contract Start & End Dates	May 2011 – September 2026
Dollar Value and Type of Annual Operational Cost Savings (if applicable) (e.g., outside maintenance contracts, material savings, etc.)	Performance-Based contract with guaranteed energy savings over a fifteen (15) year period. “Proposed” Guaranteed Energy Savings: \$482,613 “Proposed” Operational Savings: \$5,600
Method(s) of Savings Measurement and Verification	Measurement and Verification Approach IPMVP Option C
Provide CURRENT and ACCURATE telephone numbers and email addresses of the owner(s) representatives with whom your firm did business with on this project. You should ensure that all representatives are familiar with this project.	Joshua Feldmark, Howard Co. Executive Director (410) 313-2056 Email: jfeldmark@howardcountymd.gov
Describe the specific roles and responsibilities of ESCO personnel associated with the identified project. Limit your response to only those personnel who will be directly involved in the Customer’s project.	Energy Systems Group provided engineering, design, project management, financing, and guaranteed energy savings. Subcontractors were involved in the installation of equipment. In addition, ESG will monitor, measure, and verify Savings.
ESG Personnel involved who are included in this response (refer to Org Chart in Sec 5)	Andrew Miller, Mahesh Bala, Mark Winters, Brett Daniels, Corporate M&V team and Officers



ANNUAL ENERGY SAVINGS DATA FORM

Name of Project: Howard County Government

Name of ESCO: Energy Systems Group, LLC

	<i>Projected</i>	<i>Guaranteed</i>	<i>Achieved</i>				
			<i>Year 1 (2011- 2012)</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>
<i>KWH</i>	5,183,037	4,009,498	4,186,255	Ongoing			
<i>KW Demand</i>	6,270/yr.	5,330/yr.	5,470/yr.	Ongoing			
<i>Therms*</i>	34,521	24,767	34,091	Ongoing			
<i>Water (Gallons)</i>							
<i>Other (Specify)</i>							
<i>Other (Specify)</i>							

* (includes fuel switching from #2 oil to natural gas)



PROJECT HISTORY AND CLIENT REFERENCE FORM

Project Name and Location; Number of Buildings; Primary Use; Total Square Footage	University of Baltimore (UB); Baltimore, MD; Higher Education Facilities; 700,000 square foot
Project Dollar Amount (installed project costs); Source of Project Financing	\$8,085,898 ; Master Lease and State Agency Loan Program
Primary ESMs Installed; ESCO Services Provided	A comprehensive package of energy conservation measures was developed to address energy and water consumption, which included a new chiller systems, new boilers, lighting and controls and improvements to the building envelope. A number of green/renewable measures were implemented including solar PV and skylights, and a green roof.
Construction Start & End Dates	June 2009 – February 2011
Contract Start & End Dates	March 2011 – September 2024
Dollar Value and Type of Annual Operational Cost Savings (if applicable) (e.g., outside maintenance contracts, material savings, etc.)	Performance-Based contract with guaranteed energy savings over a thirteen (13) year period. “Proposed” Guaranteed Energy Savings: \$601,000 “Proposed” Operational Savings: \$125,000
Method(s) of Savings Measurement and Verification	Measurement and Verification Approach IPMVP Option C
Provide CURRENT and ACCURATE telephone numbers and email addresses of the owner(s)’ representatives with whom your firm did business with on this project. You should ensure that all representatives are familiar with this project.	Steve Cassard, Vice President (410) 837-5065 Email: Scassard@ubalt.edu
Describe the specific roles and responsibilities of ESCO personnel associated with the identified project. Limit your response to only those personnel who will be directly involved in the Customer’s project.	Energy Systems Group provided engineering, design, project management, financing, and guaranteed energy savings. Subcontractors were involved in the installation of equipment. In addition, ESG will monitor, measure, and verify savings.
ESG Personnel involved who are included in this response (refer to Org Chart in Sec 5)	Andrew Miller, Mahesh Bala, Mark Winters, Owen Williams, Corporate M&V team and Officers



ANNUAL ENERGY SAVINGS DATA FORM

Name of Project: University of Baltimore

Name of ESCO: Energy Systems Group, LLC

	<i>Projected</i>	<i>Guaranteed</i>	<i>Achieved</i>				
			<i>Year 1 (2011-2012)</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>
<i>KWH</i>	4,232,079	3,718,521	3,892,527				
<i>KW Demand</i>							
<i>Therms</i>	143,926	123,053	145,969				
<i>Water (Gallons)</i>							
<i>Other (Specify)</i>							
<i>Other (Specify)</i>							



PROJECT HISTORY AND CLIENT REFERENCE FORM

Project Name and Location; Number of Buildings; Primary Use; Total Square Footage	Baltimore City Public School System, 200 East North Avenue, Baltimore, MD 21202 34 Buildings; School System; 3,036,856 square foot
Project Dollar Amount (installed project costs); Source of Project Financing	\$22,986,710 – secured own financing through City of Baltimore Master Lease Program
Primary ESMs Installed; ESCO Services Provided	Installed measures include upgraded HVAC, Lighting and Electrical Systems, as well as New Windows and Building Envelope Improvements.
Construction Start & End Dates	June 2006 through August 2008
Contract Start & End Dates	September 2008 through August 2023
Dollar Value and Type of Annual Operational Cost Savings (if applicable) (e.g., outside maintenance contracts, material savings, etc.)	Annual Avg. Guaranteed Energy Savings: \$ 1,101,048 Guaranteed Construction Energy Savings: \$582,897 Annual Avg. Projected Operational Savings: \$2,017,565 To Date Actual Energy Savings: \$ 1,825,678
Method(s) of Savings Measurement and Verification	Measurement and Verification Approach IPMVP Option C
Provide CURRENT and ACCURATE telephone numbers and email addresses of the owner(s)' representatives with whom your firm did business with on this project. You should ensure that all representatives are familiar with this project.	J. Keith Scroggins (410) 396-8721 Email: kscroggins@bcps.k12.md.us Alex Delgado (410) 396-8677 adelgado@bcps.k12.md.us
Describe the specific roles and responsibilities of ESCO personnel associated with the identified project. Limit your response to only those personnel who will be directly involved in the Customer's project.	Energy Systems Group provided engineering, development and design, project management, financing and bonds, and guaranteed energy savings. Subcontractors were involved in the installation of the energy conservation measures. In addition, ESG will monitor, measure, and verify savings; and provide ongoing staff training, strategic energy master planning, and ongoing operation and maintenance.
ESG Personnel involved who are included in this response (refer to Org Chart in Sec 5)	Andrew Miller, Mahesh Bala, Corporate M&V team and Officers



ANNUAL ENERGY SAVINGS DATA FORM

Name of Project: Baltimore City Public School System Name of ESCO: Energy Systems Group, LLC

	<i>Projected</i>	<i>Guaranteed</i>	<i>Achieved</i>				
			<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>
<i>KWH</i>	6,838,700	5,402,575	M&V terminated by client				
<i>KW Demand</i>	None	None					
<i>Therms</i>	227,838	184,549					
<i>Water (Gallons)</i>	25,580	23,022					
<i>Other (#2 oil, gallons)</i>	60,723	49,186					
<i>Other (steam,)</i>	2,717	2,201					