March 31, 2017

The Honorable Rick Perry
Secretary
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Dear Mr. Secretary,

On behalf of the National Association of Energy Service Companies, I am writing to congratulate you on your confirmation as Secretary of Energy, to introduce NAESCO, and to describe for you how we think the work of our member companies can contribute to the efforts of the Trump Administration to rebuild America’s infrastructure.

NAESCO is the national trade organization of the Energy Service Company (ESCO) industry. Our member companies, which range from business units of major industrial corporations to regional specialty companies (please see the attached Introduction to NAESCO), deliver about $7 billion of privately-financed energy efficiency investments annually to public agency customers across the country. Our projects are primarily delivered through Energy Savings Performance Contracts (ESPC), the type of public-private partnerships with the longest track record in the US (about $50 billion over 25 years). ESPC projects re-purpose the money that public agencies currently spend on wasted energy and the maintenance of obsolete equipment into a payment stream that finances badly needed capital improvements without the need for new taxes. You are probably familiar with the work of our member companies in Texas, where they have delivered hundreds of millions of dollars’ worth of projects during the past two decades (please see the attached sample Texas case studies).

ESPC projects enjoy strong bi-partisan support, because they use private investment to deliver public benefits. The Bush and Obama administrations pushed ESPC aggressively for federal facilities with Executive Orders and administrative programs. The Congress has also supported ESPC during this same time period, most recently with 2017 legislation, sponsored by Senators Gardner, Portman, Coons and Shaheen and Representatives Kinzinger and Welch. The Energy Savings Through Public-Private Partnerships Act of 2017 would require federal agencies to implement cost-effective energy and water savings measures and projects, such as ESPCs, in their facilities. Nationally, Performance Contracting is enabled in all 50 states, and has most recently been enhanced in states with conservative Republican majorities, like Michigan, because it reduces government waste.
The US Chamber of Commerce has been a strong proponent of ESPC as a jobs creating tool (please see attached Chamber of Commerce letter supporting the Gardner/Coons bill). Additionally, the National Association of Manufactures (NAM), in its “Competing to Win: Energy in Focus” white paper, recommended that the Trump administration institute a new $5 billion goal for performance contracts in federal government facilities.

We believe that ESPC should be a key component of President Trump’s infrastructure program, because ESCOs have a track record of delivering more than $50 billion of privately financed improvements to key components of our infrastructure – schools, hospitals, universities, military bases, federal civilian agency facilities, municipal and state agency facilities, and water supply and treatment facilities – across the US. We believe an aggressive ESPC program can generate hundreds of thousands of good jobs (please see attached Work Paper showcasing job creation).

Continuing to support this national ESPC effort does not require massive new federal funding or a new federal bureaucracy. It can be launched by President Trump utilizing the bully pulpit, calling for federal agencies to further leverage ESPC, and offering Governors across the country technical assistance from the US DOE to exploit the full potential of utilizing ESPC to support their public buildings, facilities and infrastructure. Some modest funding enhancements to existing federal bonding programs can add momentum once the train gets rolling.

We suggest that DOE continue to focus on identifying and removing the administrative barriers to ESPC. The DOE Federal Energy Management Program (FEMP) has been successful in this work over the years, and NAESCO has helped by working with the national labs to identify and produce a set of proactive recommendations and best practices that many states have adopted. We think this President has a new opportunity to ramp up these efforts by focusing on ESPC as a jobs, manufacturing and infrastructure tool.

In closing, NAESCO wishes you every success as Secretary of Energy, and we stand ready to work with you and your team to deliver the potential ESPC jobs and private investment as part of President Trump’s infrastructure program.

Sincerely,

Donald Gilligan
President
Introduction to NAESCO


During the past twenty years, NAESCO member companies have implemented several hundred million dollars’ worth of energy efficiency, demand response, renewable energy and distributed generation projects to Texas industrial, commercial, institutional, and residential customers. Nationally, NAESCO member projects have produced:

- $50 billion in projects paid from savings
- $55 billion in savings – guaranteed and verified
- 400,000 person-years of direct employment
- $35 billion of infrastructure improvements in public facilities
- 450 million tons of CO2 savings at no additional cost

Federal Performance Contracting Coalition (FPCC)

A subset of NAESCO members are also represented by the FPCC, which concentrates on the implementation of ESPC and UESC projects at federal civilian and military facilities. FPCC members include: AECOM Energy, Ameresco, Clark Energy Group, Constellation New Energy, Energy Systems Group, Honeywell, Johnson Controls, Lockheed Martin, Noreesco, Schneider Electric, Siemens and Trane.

Energy Saving Capital Improvements without New Taxes

Most of these projects are delivered through Energy Savings Performance Contracts (ESPC), the most successful type of public-private partnership in the US, which re-purpose the money that a federal, state or local government agency is currently spending on wasted energy into a payment stream for energy-saving capital improvements.
Direct Jobs to Energy Service Companies (ESCOs) equates to 20 jobs at a cost of $100,000 per employee for technical, engineering and management personnel. Direct jobs to local subcontractors for installation of equipment and other services equates to 40 jobs at $75,000 per employee. Indirect jobs at equipment manufacturers (e.g. lighting, boilers, chillers, etc.) equates to 35 fully burdened jobs according to the National Association of Manufacturers estimates which are based on U.S. Commerce Department data.

“Jobs” refers to average annual Full Time Equivalents (FTEs) i.e. if 2 part-time jobs are created, the model calculates it as 1 job. These job numbers underestimate the impact of job creation as the majority of jobs created since 2008 have been part-time and temporary jobs. So it is reasonable to estimate that 2 - 3X the number of individuals will be impacted by the job creation shown. - Martha Amram, MIT PhD economist

The calculator uses multipliers from RIMS II, from the Bureau from Economic Analysis. RIMS II Multipliers used are from the U.S. Department of Commerce, Bureau of Economic Analysis; “RIMS II input-output multipliers show how local demand shocks affect total gross output, value added, earnings, and employment in the region.” https://www.bea.gov/regional/rims/rimsii/
# Texas Case Studies

## City of Dallas

**ESCO:** Schneider Electric  
**Type of Facility:** 6 facilities  
**Approximate Contract Value:** $9,468,570  
**Technologies Included in Project:** HVAC upgrades, lighting retrofits, energy management systems, and solar domestic hot water.  
**Estimated Project Savings:** $1,282,834 annually

## San Antonio Water System

**ESCO:** Ameresco  
**Type of Project:** Biogas sustainable project – utilizing all the elements from processing of waste-water.  
**Scope of Project:** The biogas facility processes more than 1.5 million standard cubic feet of biogas a day and delivers a minimum of 900,000 cubic feet of natural gas. SAWS is recycling and reusing nearly all waste creating a “recycling trifecta.” 80% of biosolids is used to generate compost. 115 million gallons a day of high-quality recycled water can be used at the Riverwalk, golf courses, parks, and for commercial and industrial customers.  
**Estimated Project Savings:** $200,000 annually

## NASA Johnson Space Flight Center

**ESCO:** Honeywell  
**Type of Facility:** International Space Station and Space Shuttle program facility consisting of 140 buildings measuring 4,000,000 square feet.  
**Approximate Contract Value:** $18,400,000  
**Technologies Included in Project:** Boiler and chiller plant improvements, building automation systems, HVAC, lighting upgrades, renewable energy systems, energy/utility distribution systems, and water and sewer conservation.  
**Estimated Project Savings:** $1,700,000 annually

## Dyess Air Force Base

**ESCO:** Siemens  
**Type of Project:** Effluent Water Project  
**Approximate Contract Value:** $3.3 million  
**Technologies Included in Project:** Excavation of two 11 million gallon reservoirs, two pump stations, and three miles of distribution piping  
**Estimated Project Savings:** $300,000 annually
<table>
<thead>
<tr>
<th>Facility Name</th>
<th>ESCO:</th>
<th>Type of Facility</th>
<th>Technologies Included in Project</th>
<th>Estimated Project Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bell County Expo Center</td>
<td>Performance Services</td>
<td>6,600 seat multi-purpose arena</td>
<td>Lighting upgrades, power conditioning equipment for surge protection, HVAC upgrades, building automation, and pipe insulation replacement.</td>
<td>50% KWH savings annually</td>
</tr>
<tr>
<td>Texas Parks &amp; Wildlife Department</td>
<td>Schneider Electric</td>
<td>2 buildings (189,318 sq. feet)</td>
<td>High efficiency transformers, mechanical system upgrades, energy management system upgrade, lighting retrofit, water conservation and window film.</td>
<td>$130,145 the first year and $107,000 each following year.</td>
</tr>
<tr>
<td>City of Arlington</td>
<td>Opterra Energy Services</td>
<td>22 buildings</td>
<td>Lighting upgrades, HVAC units and control modernization, chiller, cooling tower and boiler replacement, and domestic water retrofits.</td>
<td>$18 million over 15 years</td>
</tr>
<tr>
<td>Texas State Technical College</td>
<td>Trane</td>
<td>campus buildings serving 30,000 students</td>
<td>New chiller plant and systems, HVAC, rooftop solar, lighting upgrades, building automation.</td>
<td>$344,000 savings annually and a total of $610,000 in incentives</td>
</tr>
</tbody>
</table>
| Texas Woman’s University | ESCO: Schneider Electric  
**Type of Facility:** College campus with 37 buildings  
**Approximate Contract Value:** $19,356,139  
**Technologies Included in the Project:** New central chilled water plant, new chilled water distribution loop, lighting retrofits, VAV box replacements, steam boiler replacement, digital controls retrofit, and backup high-voltage substation.  
**Estimated Project Savings:** $2,158,166 annually |
| --- | --- |
| City of Dallas Water Utilities | ESCO: Ameresco  
**Type of Project:** Cogeneration Facility  
**Technologies Included in the Project:** Biogas, CHP, Cogeneration, Renewable Energy  
**Estimated Project Savings:** 30,000,00 kWh annually |
| Brazosport Independent School District | ESCO: Schneider Electric  
**Type of Facility:** 6,600 seat multi-purpose arena  
**Approximate Contract Value:** $7,332,403  
**Technologies Included in Project:** Mechanical system upgrades and replacements, district-wide domestic water conservation, lighting upgrades, controls installation, building envelope upgrades, and revamping abandoned water towers.  
**Estimated Project Savings:** $588,281 savings annually |
**Type of Facility:** NASA JSC is home to the nation’s astronaut corps, the International Space Station mission operations, the Orion Program, and various future space developments.  
**Approximate Contract Value:** $49.9 Million  
**Technologies Included in Project:** The NASA JSC CHP facility will produce 11.9 megawatts of electricity and 100,000 pounds per hour of high pressure steam. The steam will be simultaneously used for heating and to generate chilled water via existing steam turbine-driven chillers.  
**Estimated Project Savings:** Over $3.9 Million in annual energy and operational savings |
January 30, 2017

The Honorable Cory Gardner  
United States Senate  
Washington, DC 20510

The Honorable Christopher Coons  
United States Senate  
Washington, DC 20510

The Honorable Adam Kinzinger  
U.S. House of Representatives  
Washington, DC 20515

The Honorable Peter Welch  
U.S. House of Representatives  
Washington, DC 20515

Dear Senators Gardner and Coons and Representatives Kinzinger and Welch:

The U.S. Chamber of Commerce commends the Energy Savings Through Public-Private Partnerships Act of 2017, which would improve energy efficiency within the federal government and reduce spending through the usage of Energy Savings Performance Contracts (ESPCs) and Utility Energy Service Contracts (UESCs).

The use of ESPCs and UESCs in the federal government has been a bipartisan and commonsense solution for more than a decade. The Chamber is a longtime supporter of ESPCs and UESCs, which reduce the energy intensity of federal buildings, decrease energy costs within the federal government, and create private sector jobs—at no cost to taxpayers. These contracts serve as an alternative-financing mechanism enabling federal agencies to procure energy efficiency services and projects without relying on appropriated funds.

Your work in the area of ESPCs and UESCs has been instrumental in reducing energy spending and usage while increasing job growth and growing the American economy. The Chamber thanks you for introducing the Energy Savings Through Public-Private Partnerships Act and looks forward to working with you on this important legislation.

Sincerely,

Neil Bradley
Renewing Critical Infrastructure
ESPC Can Make Substantial Contribution

In addition to the widely-publicized need to renovate America’s transportation infrastructure, other critical elements of the nation’s infrastructure – schools, public buildings, military bases and water/wastewater systems – also desperately need renovation.

Examples of Public Facility Infrastructure Needs

<table>
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<th>Description</th>
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<tr>
<td><strong>Schools</strong></td>
<td>$38 billion annual gap in the investment required to bring school buildings up to “good” condition. Nearly half have facilities in “fair” or “poor” condition.¹</td>
</tr>
</tbody>
</table>
| **Federal facilities**   | $165 billion deferred maintenance and repairs in federal facilities²
Eliminating $1 billion of annual energy waste in military facilities³
$23 billion deferred maintenance in USAF facilities⁴ |
| **State and local government facilities** | $4.4 billion deferred maintenance in North Carolina state facilities⁵
$1.5 billion deferred maintenance in Texas state facilities⁶
$77 billion deferred maintenance in California facilities⁷
$2.8 Billion deferred maintenance at Ohio state universities⁸ |
| **Water and wastewater treatment facilities** | $600 billion over 20 years⁹ |

It seems highly unlikely that either the Congress or the various state legislatures will appropriate the capital funding required to renovate these facilities. However, there is a ready source of “free” funding to available to finance a significant amount of this work. Experts estimate that as much as 40% of the infrastructure needs of government facilities are energy-related.¹⁰ For example, Energy Savings Performance Contracting (ESPC) can repurpose the money currently spent on wasted energy and the maintenance of obsolete equipment into a payment stream to repay the costs of private financing for capital improvements. For example, eliminating the estimated $1 billion of annual energy waste in military facilities¹¹ can generate a payment stream to finance at least $15-20 billion of capital improvements. As noted above, US ESCOs have a track record of delivering more than $50 billion of ESPC projects over the past 25 years, currently at the rate of about $6 billion annually. We can significantly ramp up this production level to meet the challenge of a Trump Administration significant infrastructure program.

Job Creation

A $10-20 billion annual ESPC program will create about 95,000 direct and indirect jobs, plus an additional 100,000 implied or “multiplier” jobs in every community across the country, wherever there are schools, police stations water works and other facilities that need renovation.

⁴ “National Defense” NDIA, March 2016
⁵ North Carolina State Construction Conference, March 2016
⁶ “Construction Citizen,” March 17, 2015
⁷ “California Five-Year Infrastructure Plan,” 2016, page 4
¹⁰ K. Kampschroer, US General Services Administration
Modernizing America’s Schools

K-12 schools spend about $46 billion annually on Maintenance and Operations. Approximately 30-35% of this amount, or about $14-16 billion annually, is payment for utilities. Reducing these expenditures by 25% generates a payment stream of nearly $4 billion per year, which can finance a minimum of $40 billion of improvements. The need for rehabilitation is particularly acute in rural areas, smaller cities, and major cities in the northern Midwest “Rust Belt”. Distributed energy systems should also be included to make schools more resilient so they are able to function as community shelters in natural disasters and extreme weather events.

Modernizing Federal Government Facilities

Since 2011, private investors have financed more than $4 billion of modernization improvements in federal government facilities, and have been repaid from savings, not from new taxes. An additional $10 billion of modernization projects have already been identified by the Federal Performance Contracting Coalition (FPCC), in its March 21, 2017 letter to President Trump.

Modernizing Critical State and Local Government Facilities

Several events over the past few years have shown that aging public facilities, such as police and fire stations, hospitals, power plants, gas and electric transmission and distribution systems, and oil refineries can be rendered unusable by natural disasters or cyberattacks. These facilities can be made more resilient with the widespread implementation of energy efficient and distributed energy technologies such as microgrids that can be financed with private investments.

Renovating Water Distribution and Treatment Facilities

Moving and treating water requires an extensive infrastructure of pipes and plants and massive amounts of energy. Water and wastewater treatment, which uses energy to power pumps and filtration processes, typically accounts for 30-40% of the energy consumed by a municipality and offers opportunities to cut energy waste at every step: improving equipment efficiency, reducing water leakage, implementing advanced metering systems that accurately record water usage, and deploying energy recovery and generation technologies like combined heat and power (CHP). Reducing energy waste generates cash flow that has an immediate impact on local government budgets, reducing the need for water rate increases to repay the investors that finance improvements. A modest amount of federal tax incentives can stimulate private investment in water systems.

12 “State of Our Schools, America’s K-12 Facilities,” 2016, pages 13-14