

an independent energy solutions company



# Opportunities for Stimulus Funding: Energy Efficiency and Renewable Energy Projects In New Castle County's Facilities

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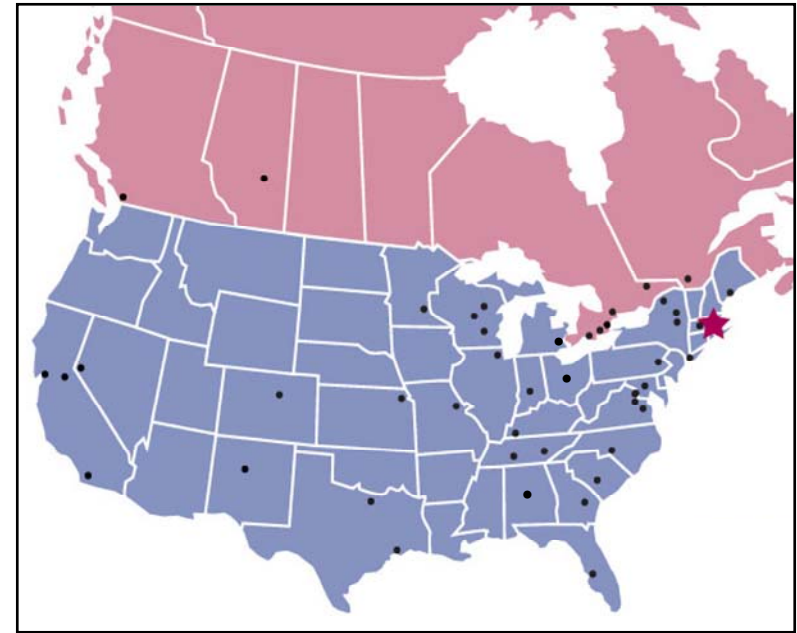


# □ Company Overview

## Ameresco

***Ameresco, Inc. is the largest independent energy services provider in North America.***

- Nearly 30 years experience
- Completed over \$4 billion in energy projects to date.
  - In 2007, our revenue was over \$350 million, which represents an average annual growth of 46% over the last 3 years.
- Bonding capacity of \$500 million with single project bonding capacity of \$85 million.
- Independent company – technology and equipment neutral
- Lean, flexible organization
- Local DE company with renewable energy projects and employees in Georgetown and Felton, DE. Clients include DSWA, NCC, and the State of Delaware



Over 600 employees located in offices across North America, including multiple offices in DE, PA, DC, MD, and VA

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# Comprehensive Services

## Clean. Green. Sustainable.

Energy Efficiency	Energy Supply Management	Energy Infrastructure	Renewable Energy
Energy Savings Performance Contracting	Commodity Procurement	Asset Monetization	Landfill Gas
Demand-side Management	GHG Measurement & Monetization	Plant Rehabilitation	Biogas
Demand Response	Rate Analysis & Negotiation	Facilities Management	Solar - PV and Thermal
Turnkey Design/Build	Price Risk Mitigation	On-site Cogeneration	Wind
Facility Renewal	Billing Administration	Distributed Generation	Biomass
LEED Construction	Market & Regulatory Analysis		Geothermal
Power Quality & Reliability			Hydroelectric

- Implemented nearly \$4 billion dollars in energy solutions
- Award Winning Expertise in Renewable Energy Asset Development
- Supply Management clients represent over \$1.5 billion in annual energy spending

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**ASHRE: Outstanding HVAC Achievement**  
**Toronto City Hall: First place ASHRAE Award**  
**Mount Sinai Hospital: First place ASHRAE Award**  
**Liquor Control Board of Ottawa: First place ASHRAE Award**  
**Hughes Danbury Optical Systems: First Place Technology Award**



Veterans Hospital  
Richmond, VA



**Ameresco's Landfill Gas Project with BMW:**  
**2005 EPA Green Star Award**  
**2003 Governor's Excellence Award**  
**2003 EPA Project of the Year Award**  
**2003 EPA and DOE Green Power Leadership Award**



Landfill Gas Project by Ameresco  
2004 EPA Energy Partner of the Year



2004	FROST & SULLIVAN Entrepreneurial Company Award
2006	FROST & SULLIVAN U.S. Energy Service Company Emerging Company of the Year Award
2007	FROST & SULLIVAN North American Energy Services Growth Strategy Leadership of the Year Award



AMERICAN COLLEGE & UNIVERSITY  
PRESIDENTS CLIMATE COMMITMENT

WORCESTER  
**Business Journal**  
Ameresco, 2004 Top Growth Company



Best Project of 2004  
Association of SC Energy Managers



"New Contractor of the Year" award, based on performance, customer service, technical expertise, and savings generated



Outstanding achievement  
in lighting design



Chiller plant awarded  
Energy Project of the Year



2007, 2004, and  
2003 EPA  
Industry Partner  
of the Year



# U.S. DOE ESCO Scoring, December 2008



- 16 ESCO's selected for up to \$80 Billion in Energy Efficiency, Renewable Energy, and Water Conservation Projects
  - Ameresco received highest overall technical score of any ESCO
  - Ameresco received perfect (10/10) Past Performance Rating

## 1 – Ameresco, Inc.

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2 – Constellation Energy

2 – Honeywell (tie)

2 – Siemens (tie)

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5 – Clark Realty Builders

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6 – Chevron

6 – McKinstry (tie)

6 – Noresco (tie)

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9 – Lockheed Martin

9 – The Benham Company (tie)

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11 – Johnson Controls

11 – Trane U.S. (tie)

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13 – ConEdison Solution

13 – FPL Energy Services (tie)

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15 – T.A.C. Energy Solutions

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16 – Pepco Energy Services



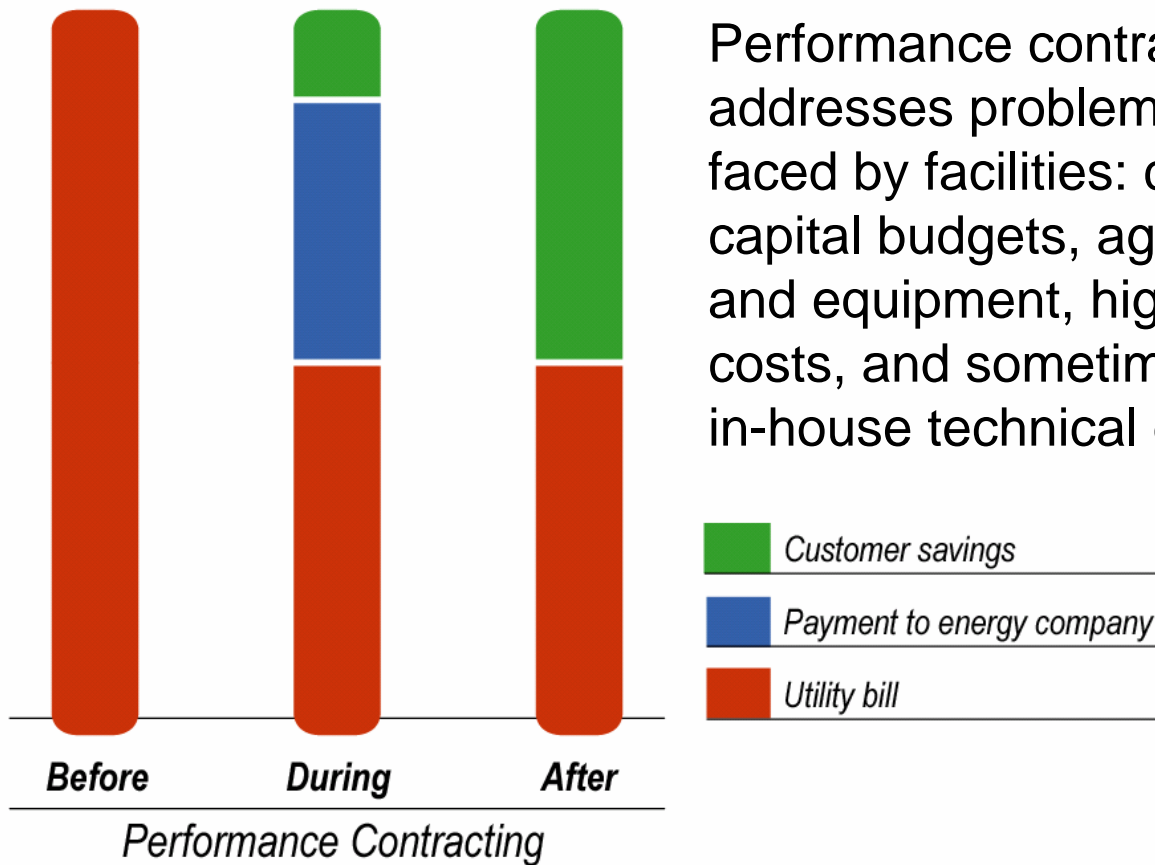
# Performance Contracting



## Implementing Energy Efficiency Upgrades

- **A facility partners with Ameresco to evaluate and facilitate infrastructure improvements. Ameresco will:**
  - **Develop;**
  - **Engineer and Design;**
  - **Permit;**
  - **Finance; and**
  - **Implement**
- **Ameresco guarantees the energy savings determined in the detailed assessment materializes over the contract term**
- **Capital investments into the energy infrastructure are made by the client (stimulus funds) and by Ameresco. Ameresco's investment is paid back through the savings**
  - **Reduce debt**
  - **Shorten payback**

# Performance Contracting



## Example Energy Conservation Measures

- Energy Efficient Lighting Systems
- Heating, Ventilating, and Air Conditioning (HVAC) Systems
- Building Automation/Management Systems
- Building Envelope (Roofing Systems, Windows & Doors, Tuckpointing, Insulation)
- Central Plant (steam, cogeneration, chiller, boiler)
- Client owned utility distribution systems (steam, electric, chilled water)
- Geothermal Systems
- Renewable Energy (Solar, Wind, Landfill Methane, Biomass)
- Irrigation Systems
- Water Conservation Measures
- Utility sub-metering
- Facility Renewal following EPA Energy Star and/or LEED protocols
- Life Safety and ADA improvements
- Establish carbon baseline, carbon tracking, and emissions reductions
- Electric Transmission and Distribution
- Electric Load Shaping

## Recent Implemented Innovations

### Irrigation, Water, and Sewer Systems

- Xeriscaping – *State of Nevada*
- Metering and Distribution – *Yonkers, Portsmouth, and U.S. Virgin Islands HA*
- Wastewater Treatment and Water Treatment – *San Antonio, Gallipolis*

### Renewable Energy Systems

- Solar Hot Water – *West LA College*
- Photovoltaic Power – *Hill AFB*
- Landfill Gas – *State of Missouri Corrections*
- Wind – *Sherrard and Porta Schools*
- Biomass – *National Renewable Laboratory, Arizona Forest Products*
- Geothermal – *Charleston Air Force Base, Big Springs School District*

### Exterior Lighting

- LED Traffic Signal Conversion – *Quincy, Brockton*
- Fiber Optic Systems – *Winthrop U*
- Street Light Conversion – *Belpre*

### Commissioning

- *CSU Bakersfield, CSU Sacramento, CSU Channel Islands*
- *Austin Bergstrom International Airport*

### Capital Measures

- Fiber Optic Network – *Newport News*
- Life Systems – *Multiple School Districts throughout the Midwest*
- Trash Compactors – *Washoe County School District*

### Carbon Footprint Reduction Analysis

- Emissions – *Suffolk University*

## Benefits of Performance Contracting

- ❑ Reduced demand for energy, water
- ❑ State-of-the-art equipment & upgrades
- ❑ Improved facilities, longer life
- ❑ Improved productivity/quality environment
- ❑ Reduced emissions & carbon footprint
- ❑ Cost savings
- ❑ Creates green jobs
- ❑ Infuses money into the economy
- ❑ Avoid expending budgeted capital
- ❑ Lower repair and O&M costs
- ❑ Preserved debt capacity





**Energy Efficiency and  
Renewable Energy Project  
with New Castle County**



## Project Description

- NCC set ambitious goal to create a carbon neutral community
  - Spark economic development
  - Creating green jobs that provide opportunities for all DE citizens
  - Protect the environment
- Selected Ameresco through a competitive bid process
- Project Scope
  - Reduce energy demand and costs in 20 County facilities
  - Identify 158 energy, waste, and cost saving measures
  - Identify two solar installations

**Savings over 20 years are guaranteed to be over \$450,000 annually**

Recommended Measures	
ECM 1:	Lighting System Improvements
ECM 2:	Lighting Controls
ECM 3:	Integrated and New Energy Management System
ECM 4:	Water Conservation
ECM 5:	Premium Efficiency Motors
ECM 6:	Vending Machine Controls
ECM 7:	Variable Frequency Drives for Air Handlers
ECM 8:	Waste Oil Heaters
ECM 9:	Solar Photovoltaic Systems
ECM 10:	Electric to Gas Kitchen Appliance Conversions
ECM 11:	Electric to Gas Heat Conversions
ECM 12:	Heat Pump Replacements
ECM 13:	Heat Pump System Improvements
ECM 14:	Boiler Replacements
ECM 15:	Roof Replacements
ECM 16:	Cooling Tower Replacements
ECM 17:	Ventilation Improvements
ECM 18:	HVAC Improvements
	ECMs Considered but not Recommended

## Benefits

- Upgrades will result in reduced energy consumption and reduction of harmful emissions of carbon dioxide.
- This project will greatly impact the emissions associated with supplying electricity to NCC's facilities as well as the emissions associated with burning fossil fuels for space heating and domestic hot water.
- The following emissions reductions will occur as a result of this project:

<b>CO<sub>2</sub></b>	<b>11,823,706</b>	<b>lbs</b>
<b>SO<sub>2</sub></b>	<b>30,737</b>	<b>lbs</b>
<b>NO<sub>x</sub></b>	<b>16,387</b>	<b>lbs</b>
<b>Mercury</b>	<b>6.4</b>	<b>mg</b>

- Reducing of 11,823,706 lbs of CO<sub>2</sub> dioxide is equivalent to
  - Planting over 17,000 trees annually
  - Removing 1100 polluting automobiles from DE's roads annually
- Saves enough energy to power about 250 homes annually.

**This project has the potential to  
create/sustain over 156 local green jobs**

## Office Building: New Castle County, DE



Ameresco has worked with this cutting edge community on a energy and water efficiency project that has a projected annual savings of \$355,376. Ameresco has also helped NCC chart their carbon emissions, procure power, and conduct outreach to building occupants. Ameresco has now started phase II, which will include an assessment of over 50 county buildings.

- ✓ Energy Saving Performance Contract; no taxpayer funds were expended
- ✓ 15-year agreement
- ✓ Ten story office building/192,902 sq. ft.
- ✓ Projects include: design, build, training, and measurement & verification: including:
  - ✓ Lighting Improvements & Controls
  - ✓ New Energy management System
  - ✓ Boiler, Chiller, Cooling tower replacement
  - ✓ Variable Volume Hot & Chilled Water Pumping
  - ✓ Premium Efficiency Motors
  - ✓ Water and Natural Gas Conservation
  - ✓ EnergyStar Certification
- ✓ Projected annual savings of 2,227,409 KWh, 1,889 kW, 75,218 gals of oil, 847 kgals of water, 847 kGals Sewer, (68, 074) ccf (Nat. Gas)



# Schedule & Next Steps

## Schedule

- Funding: Fall 2009
  - Receive stimulus funds, allocated funding
- Supplier Forum: Fall/Winter 2009
  - Ameresco host supplier forum to provide technical information on services/equipment for implementation
- RFPs: Fall/Winter 2009
  - Release RFPs for services, speciality trades
  - RFPs due Q1 2010
- Project Implementation: 2010
  - Complete implementation of efficiency measures and renewable energy projects within 18-24 months

## For Vendors, Suppliers, Contractors

- Work with NCC, Ameresco and DelAccess to identify project and partnership opportunities
- Track the DelAccess Website for information about the Fall 2009 Vendor information session
  - Detail specific technical information about project needs
  - Discuss questions with Ameresco engineers
  - Obtain request for proposals (RFPs)
  - Create teaming arrangements with other local, minority, or women owned businesses



**Ameresco is committed to working with NCC and DelAccess to ensure participation of local, minority, and women owned businesses**



## For Munis: NCC Existing Contract Vehicle

- Other counties, municipalities, cities, entities, can use contract vehicle with Ameresco
  - Expedite process
  - Looking for shovel ready projects
  - Quick assessment of project potential
- Engaged in a competitive bid process
  - 14 respondents
  - Two stage process
  - Interview process
  - Ameresco selected based on qualifications and ability to meet NCC's diverse needs



Thank you

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