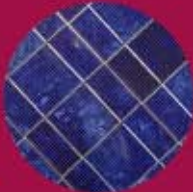


# Ameresco Overview

February 5, 2010



AMERESCO

Green. Clean. Sustainable.

# Overview

- Introduction
- Qualifications and Experience
- Project Development Approach
- Potential Energy Conservation Measures
- Potential Energy Cost Savings
- Pricing Methodology and Financing Options
- Operations & Maintenance
-  *Ameresco* **AXIS**
- Ameresco Advantage



# Ameresco

- ▶ Largest independent Energy Services Provider in No. America
- ▶ Industry leader with experience going back 30 years
- ▶ Approved Energy Contractor on Florida State Term Contract
- ▶ \$4 Billion in energy solutions delivered
- ▶ Over \$1 Billion in projects currently in development
- ▶ Significant experience in State/Federal Sector
- ▶ Over 600 energy professionals in 56 North American offices
  - ▶ 70% are degreed engineers
- ▶ Technology and equipment neutral, objective and flexible
- ▶ Energy is our only business!



CLINTON  
CLIMATE  
INITIATIVE



FROST & SULLIVAN

AMERESCO

# Ameresco 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



# Other Projects

- Large/Noteworthy Performance Contracts
  - OMH
  - DASNY
  - U.S. Army, Navy, Air Force, Coast Guard, DOE – Multiple Projects
  - US Capitol, Library of Congress, Capitol Grounds, Capitol Police, Senate Office Building, Botanical Gardens
  - State of Delaware
  - Newport News Schools and City Government
  - Portsmouth Navel Ship Yard



# New York State Office of Mental Health

- Comprehensive Energy Efficiency Program
  - Compliance with Executive Order 111
  - Reduction of Energy Usage By 35% by 2010 Relative to 1990 Levels



# OMH Current ECM's

- Vending Misers
- Computer Power Management
- Lighting
  - Retrofits/Replacement Fixtures
  - Controls
- Solar Thermal Pool Heat
- Decentralized Chiller System



# OMH Future ECM's

- Boiler Plant Decentralization
- Boiler Controls Upgrade
- Replacement of Oil Fire Steam Boiler
- More Lighting



# Other OMH Roles

- Preventative Maintenance Service Contracts
- Monthly Performance Tracking
- Capitol Budget Requests
- New Construction/Renovation Reviews



# Elmendorf Air Force Base, AK

- Initial Investment \$49M
- Total Savings of \$123M over 22 years
- 1M mmBTU of energy savings annually
- 34M gal of water savings annually
- This comprehensive project includes the following key programs:
  - Decentralization and demolition of a 50 year old central plant
  - Installation of 300 boilers in 136 buildings
  - Comprehensive O&M contract



Project Capital: \$49M  
Cost Reductions: \$3.7M  
Term: 22 yrs  
136 Buildings  
Total Square Footage:  
4.5M



# Great Lakes Naval Training Center

- 1,500 buildings - 16 million sq.ft.
- Since 1997, the projects have saved 1,308,100 MBTUs of thermal energy
- Measures include:
  - New 11MW cogeneration system with heat recovery boilers
  - 4 MW backup capacity with diesel-powered generator
  - Facility-wide SCADA system for centralized control of electricity
  - Replacement of 1+ miles of steam and condensate piping, steam traps, & pipe insulation



Project Capital: \$101M  
Annual Cost Reductions: \$12M  
Number of Buildings: 1,500  
Total Square Footage: 16 million



# Fort Jackson, South Carolina

- \$22M Investment; 18 year term
- Replacement of HVAC systems using ground source geothermal heat pump technology
- The measures include:
  - De-Super heater for domestic hot water
  - Replacement of the HVAC system with GTHP residences and two billeting facilities.
  - Repaired and automated a central energy plant to include valve change-outs in buildings.
  - Replacement of lighting systems throughout the installation and housing
  - LED Traffic lights



Project Capital: \$22.4M  
Cost Reductions: \$1.3M/yr  
Term: 18 yrs  
1,220 Residences  
Total Square Footage:  
1,525,000



# State of Missouri Correctional Facility

- 3MW of LFGTE Cogeneration
  - Electric Power Sold to The City of Columbia, Missouri
  - Waste Heat Generated to Provide Hot Water and Steam
- Lighting
- Energy Management Controls
- Steam Traps
- Central Plant Improvements



Project Capital:	\$20,000,000
Annual Savings:	\$700k
Term:	15 yr



# Energy Supply Management

- Extensive knowledge/expertise in:
  - Energy Markets
  - Utility Rates/Ratemaking
  - Risk Management
  - Utility Bill Processing Services
- Market leverage for pricing and product eligibility
- Ameresco staff serve as cost-efficient supplement to client's existing team
- Provide vital energy “due diligence” and analysis



# Energy Supply Management

- **Soliciting Energy Bids**
  - procurement staff has average of 15 years of experience
  - handle large loads for existing clients in all competitive states
- **Contract Negotiations**
  - knowledge of national and regional suppliers' contracts
  - negotiate better terms and eliminate contract risk
- **Energy Market Research / Strategy**
  - closely monitor wholesale energy markets to anticipate movements and translate knowledge into client commodity and risk reporting
- **Risk Management and Compliance**
  - implement focused risk management solutions for current clients
  - commodity risk management reporting and ongoing communications



# Allegheny Technologies

- Ameresco manages an electric portfolio representing \$100 Million in annual electricity expenditure
- Services include:
  - developing strategic plans for approaching the competitive market as regulatory environments change and supplier “choice” becomes an option
  - supplier competitive bidding
  - supply contract negotiations
  - power pricing strategy by market
  - exploring lowering rates via utility rate options and energy invoice error detection/correction.
- Saved millions of dollars by entering into third party supply contracts recommended by Ameresco.
- Ameresco has also helped ATI explore and reap the benefits of voluntary load response programs.



# Energy Infrastructure Projects

- Developed, designed, built and in many cases owned and operated by Ameresco
- Focused on addressing the generation and delivery of the basic energy needs of clients (in most cases “behind the fence”)
- Energy facilities can be a combination of renewable and non-renewable resources



# City Centre - Chilled Water Plant

- Las Vegas, NV
- Integrated into Fitzgeralds Hotel & Casino
- Design-build, own and operate
- 20 year agreement
- Chilled Water Plant Capacity
  - 3,600 tons - (3) 1,200 ton, electric centrifugal chillers
- Unmanned Plant
  - Daily walk-thru's by service technicians and monitored remotely for alarms
- Continuous Operation serving local hotel/casinos, restaurants, office and retail loads
- Six Customers
  - CHW Service Agreements
  - Performance Guarantee customized to each customer



# Boeing Company

- Huntington Beach, CA
- Design-build, Own, Operate & Maintain
- 20 Year Agreement
- High Temperature Hot Water/  
Chilled Water Plant
  - 5,500 tons of Chiller Capacity
  - 56 MMBtu/hr of HTHW Boiler Capacity
- Project completed while maintaining full production capabilities
- Fully automated, efficient and reliable operations since 2001



# Harvard Medical School

- Boston, MA Longwood Medical Area
- 14-Story New Building Construction
- Central Chilled Water Plant
- Design-build, Operate & Maintain
  - 4,600 tons of electric centrifugal chillers:  
(2) 2,000 ton & (1) 600-ton  
enhanced efficiency chillers
  - High delta T condenser and chilled water  
design concept applied: smaller piping infrastructure & lower first cost
  - Variable speed drives on cooling tower fans
  - Variable primary chilled water pumping system
  - Fully digital and automated Chiller Plant Control System
  - Plant designed for addition of 2,000 tons of cooling capacity for future load  
growth
  - Contract CHW temperature and flow requirements



# Renewable Energy

28 Projects Owned/Operated By Ameresco  
Gross Capacity: 133.2 eMW  
684,600 tons of CO<sub>2</sub> per year avoided

- Developed, permitted, designed, built and in most cases owned and operated by Ameresco
- Rely on innovation and creativity with regard to project structure and technologies to create viable renewable energy project options
- Diverse project portfolio; our projects are large and small, direct use and electric generation; different end users, and project configurations.
- In 2003, 2004, and 2007, Ameresco was honored with the award for the U.S. Environmental Protection Agency's (EPA's) Landfill Methane Outreach Program (LMOP) Industry Partner of the Year



# Ox Mountain Renewable Energy Power Plant Half Moon Bay, CA

- 11.4 MW Landfill Gas-Fired Power Plant
- 20 Year Power Purchase Agreement - City of Palo Alto and Alameda Power & Telecom
- Patented Gas Cleaning Technology
- This project has “raised the bar” for emissions permitting for new landfill gas-fueled power plants in California
- Ameresco has 32.5 MW or nearly 25% of it’s renewable asset portfolio in California (Watsonville, Half Moon Bay, Pittsburg, Santa Clara, Paradise, Valencia)



# BMW – Landfill Gas Cogeneration Plant

## BMW Project Awards:

- 2006 Partner of the Year (Project Expansion)
- 2005 EPA's Green Star Award
- 2003 Governor's Excellence Award
- 2003 EPA's Project of the Year Award
- 2003 EPA's and U.S. Department of Energy's Green Power Leadership Award



- ✓ Designed, constructed, owns, and operates one of the largest of its type in North America
- ✓ The processing facilities deliver over 1.5 million MMBtu/year of landfill gas (> 6,000 scfm) to BMW Manufacturing Corp.
- ✓ The Facility supplies 20% of the 27 MW Electric Load and nearly 100% of the required Thermal Load
- ✓ In May 2006, BMW announced that the project was expanded to supply the energy needs of its paint shop, making it the first automotive paint shop to integrate the use of landfill gas in its process equipment



# Anheuser-Busch



Anheuser-Busch, the top U.S. beer seller, announced it plans to make one in seven of its beers (5 Billion) using renewable fuels by 2010 and gave Ameresco's project in Houston a starring role in the effort.

- Ameresco will be processing 4500 cfm of landfill gas at the McCarty Road Landfill in Houston, Texas and delivering this renewable fuel via a six mile dedicated pipeline to Anheuser-Busch Brewery
- This project will supply methane to six large boilers at the brewery
- The landfill gas will replace natural gas usage, enabling the company to substantially cut their energy costs



Gary McCuiston, left, of Allied Waste, Doug Muhleman of Anheuser-Busch and Michael Bakas of Ameresco, right, signed off on the biogas-brewery deal at a national press conference in Houston on July 30, 2008



# Solar Projects

- Over 20 dedicated solar professionals
- Two large integration facilities dedicated to solar
- Sold over 20 MW in solar equipment around the globe
- Recently awarded 300 kW grid-tie installation in Newburyport, MA



# US DOE National Renewable Energy Laboratory Campus



- Energy Savings Performance Contract and Renewable Energy Plant that Utilizes Local Wood Biomass
- Generates 9 MBtu/hr, or Approximately 600 Gallons Per Minute of Hot Water



# Sherrard Community School District, Illinois



- 600KW Wind Turbine Generator Project
- Wind Energy Only Performance Contract



Ameresco helped Sherrard win a \$420,000 grant from the State of Illinois and a CREB allocation from the federal government to get low cost financing.



# Project Management Approach

- ▶ **Single Point-of-Contact** throughout development and construction process
- ▶ **Up-front planning** and organization
- ▶ Dedicated **on-site project management** throughout construction period
- ▶ Regular customer **communication** throughout the process
- ▶ Selection of all major equipment providers on a **best-value basis**
- ▶ Use high-quality, **local sub-contractors**:
  - ▶ Utilize qualified M/WBE firms
  - ▶ Competitive project bidding process (ensures best value)
- ▶ Direct involvement of **AMERESCO senior management** throughout process
  - ▶ Allows for prompt decision-making
  - ▶ ***Onsite, Empowered, and Encouraged*** to make decisions locally
- ▶ **On time, within budget, exceed your expectations**



# Potential Energy Conservation Measures

## BUILDING MEASURES

- Lighting System Improvements
- Lighting Controls
- Motor Replacements
- Pump Replacements
- Pumping System Upgrades
- Variable Frequency Drives
- AHU replacement
- Energy Management System  
Improvements and Expansion
- Chiller Upgrades
- Cooling Tower Replacement
- Boiler Upgrades
- Steam Trap Program
- Pipe Insulation
- Boilers and LPS Conversion
- Window Replacements
- Attic Insulation
- Electrical System Upgrades
- Transformer Replacements

## WATER/WASTE WATER CONSERVATION MEASURES

- Water Conservation & Controls
- Wastewater Facility Upgrades
- Pumping Station Improvements

## ALTERNATIVE ENERGY MEASURES

- Landfill Gas-to-Energy
- Solar PV Array
- Solar Domestic Water Heaters
- Solar Pool Heaters
- Fleet Vehicle Efficiency Measures
- Cogeneration
- Solar Power Purchase Agreements

## NON-TRADITIONAL CONSERVATION MEASURES

- LED Traffic Light Conversions
- AMR Water Meter Upgrades
- Security System Upgrades
- Trash Management
- Computer Power Management
- Vending Machine Controllers



# Pricing Methodology

## Pricing Options

### ➤ Turnkey Project with Guaranteed Maximum Pricing

➤ AMERESCO has met 100% of its guarantees!

### ➤ Open Book Pricing with Pre-negotiated Fees

- Internal engineering and project development costs
- Competitively-bid subcontractor prices for materials and labor
  - Leverage purchasing power for equipment price advantage
- Internal project management labor and related costs
- Pre-negotiated fees for overhead and profit



# Operations and Maintenance

- **If desired, Ameresco will provide maintenance services:**
  - ✓ Full Service
  - ✓ Preventive
  - ✓ Corrective
- **Objective is to ensure that the installed systems are maintained appropriately to ensure efficiency**
- **Proper maintenance ensures savings can be met which is mutually beneficial**



# Training and Measurement & Verification

- Proper and complete training personnel
  - Technical: **Instructional/Formal Classroom**  
**On-Site**  
**CD Rom-Based**  
**On the Job Technician Shadowing**
  - Non-Technical: **Energy Policy Development**  
**Occupant Awareness/Behavior Modification**  
**Outreach to Community/Departments**
- Measurement and Verification
  - ▶ An integral part of the project's development
  - ▶ Follows the IPMVP
  - ▶ Ensures DMS can clearly identify energy savings
  - ▶ Each measurement is taken following a prescribed plan,  
nothing is done without the direct knowledge of the  
Department of Management Services



# Features



**A multi-dimensional approach to data management for tracking, reporting and analysis**

- Solves data issues with the most robust, accurate and relevant reporting system**
- Comprehensive facility data and cost management services**
  - Energy, Telecom, Waste, Etc.
  - Energy STAR Benchmarking
  - Carbon Footprint Reporting
- Extremely Flexible Reporting Structure**
- Multilingual and multicurrency**



# Tailored Report Generation Examples

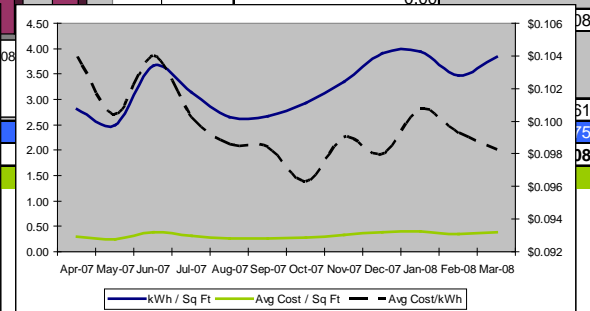
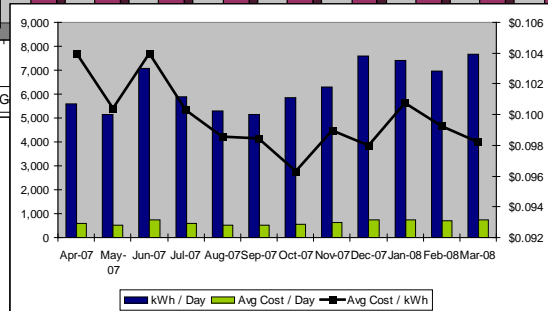
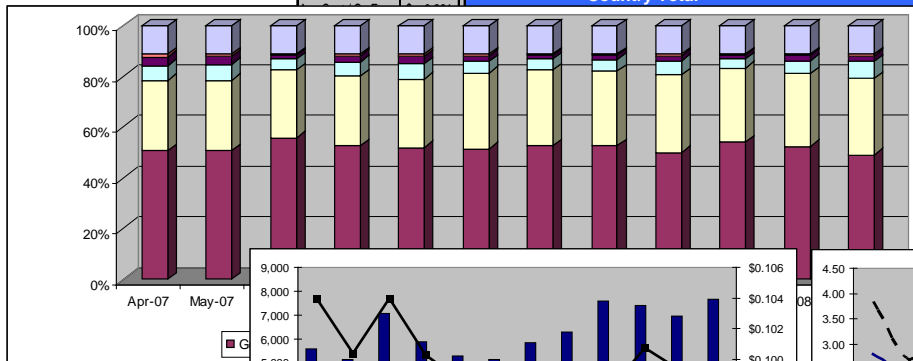
Service Detail Report - Electric																Location(s):	
04/01/2007 - 03/31/2007																ABC Industries - Dallas TX	
Service	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Total	Year	Change	%	
Usage (KWH)	234,800	236,800	208,600	229,840	219,500	179,850	159,800	153,540	168,000	149,800	158,500	188,600	2,287,630	2,086,800	200,830	9.6%	
Generation Cost	\$23,006	\$23,860	\$20,706	\$22,578	\$22,829	\$16,935	\$15,734	\$16,136	\$17,466	\$15,040	\$15,630	\$ 18,911	\$ 228,831	\$ 208,651	\$ 20,180	9.7%	
Distribution	\$12,501	\$12,984	\$ 9,800														
Transmission	\$ 2,654	\$ 2,981	\$ 1,400														
Surcharge	\$ 1,530	\$ 1,466	\$ 1,400														
Adjustment	\$ 568	\$ 495	\$ 400														
<b>Total Charges</b>	<b>\$40,259</b>	<b>\$41,786</b>	<b>\$32,700</b>														
Taxes	\$ 5,032	\$ 5,223	\$ 4,000														
<b>Total w/ Tax</b>	<b>\$45,291</b>	<b>\$47,009</b>	<b>\$37,000</b>														

Electricity Trend Report																Location(s): ABC Store	
04/1/2007 - 03/31/2008																Provider(s): Multiple	
Details	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Total	Last Year	Change	%	
Cost	\$ 17,466	\$ 15,040	\$22,829	\$18,911	\$15,630	\$15,734	\$ 16,935	\$ 19,931	\$23,006	\$23,860	\$20,706	\$ 22,578	\$232,626	\$208,651	\$ 23,975	11.5%	
Total Usage (kWh)	168,000	149,800	219,500	188,600	158,550	159,850	175,850	201,322	234,807	236,809	208,602	229,841	2,331,531	2,086,802	244,729	11.7%	
Load Factor	44%	42%	38%	50%	47%	48%	20%	42%	50%	50%	50%	53%	46%	44%	2%	4.0%	
Number of Days	30																
Square Feet	60,000																

CO <sub>2</sub> FOOTPRINT						
Reporting Year: 2007-2008						
Country	Location	Services	Consumption	Units	Indirect CO <sub>2</sub> emissions in metric tons	CO <sub>2</sub> emissions in metric tons
Canada	Vancouver, BC	Electric	52,163	MWh	21,793.93	
		Natural Gas	21,059	MMBtu	1,117.39	
		Other Fuels*			0.00	
		<b>Total</b>				<b>22,911.32</b>
<b>Country Total</b>						<b>22,911.32</b>

Usage Statistics	
kWh / Day	5,600
kWh / Sq Ft	2.80
Cost Statistics	
Avg Cost / Day	\$ 582.20

MWh	19,022.22	
MMBtu	220.25	
	0.00	
		19,242.47
MWh	12,597.56	
MMBtu	2,827.04	
	0.00	
		15,424.59
MWh	30.08	
MMBtu	0.00	
	0.00	



# Carbon Reporting

AMERESCO AXIS - Limited Scope Emissions Report														
Service Type			Carbon Dioxide (CO2)		Sulfur Hexafluoride (SF6)		Methane (CH4)		Nitrous Oxide (N2O)		Hydrofluorocarbons (HFCs)		Perfluorocarbons (PFCs)	
			Lbs (CO2)	MT CO2	Lbs (SF6)	MT CO2	Lbs (CH4)	MT CO2	Lbs (N2O)	MT CO2	Lbs (HFCs)	MT CO2	Lbs (PFCs)	MT CO2
Electricity	2004	Base Year	1,115,518	35.099	3,176	34,431			1,157	163.000				
	2007	Last Year	1,674,860	760.000	4,767	51,678			1,737	244.000				
	2008	Year to Date	2,804,754	1.272	7,985	86,564			2,910	409.000				
Natural Gas	2004	Base Year	137.549	82.400										
	2007	Last Year	123.587	56.100										
	2008	Year to Date	149.479	87.800										
Sewer	2004	Base Year												
	2007	Last Year												
	2008	Year to Date												
Water	2004	Base Year												
	2007	Last Year												
	2008	Year to Date												
<b>YTD Total</b>			<b>2,804,903.48</b>	<b>69.07</b>	<b>7,985.00</b>	<b>86,564.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2,910.00</b>	<b>409.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Date: Feb. 5, 2009

Time: 03:10 PM

1 of 1

**AMERESCO** **AXIS**  
Data is core • Data management is power



# The Ameresco Advantage

- ✓ Core Business is Energy Conservation
- ✓ Independent and Objective
- ✓ Committed to Providing Best Value
  - ✓ **Competitive bidding for products and labor**
  - ✓ **Lower cost structure than our competitors**
  - ✓ **Ameresco typically delivers more project for the same customer \$ invested**
  - ✓ **Emphasis on use of local contractors**
    - ✓ **Exceed M/WBE goals**
- ✓ Project structure shifts risk from to Ameresco
- ✓ Proven Track Record: over \$4 Billion of projects delivered
- ✓ Commitment to Partnership – not just a project!



# Awards/Recognition

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



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

Veterans Hospital  
 Richmond, VA



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



Chiller plant awarded  
 Energy Project of the Year



Outstanding achievement  
 in lighting design



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



*Integrity - Flexibility - Independence - Innovation*

**think. act. go green.**  
**THANK YOU!**



AMERESCO