SMART STREET LIGHTING AT SCALE
AGENDA

• Ameresco Overview
• LED Street Light Experience and Approach
• Case Studies
  • Phoenix
  • Tucson
  • Chicago
SAVING ENERGY, AND SUPPORTING SUSTAINABILITY GOALS

- Founded in 2000
- $2.5 Billion project financing sourced and raised
- 1,000 employees
- $5 Billion in energy solutions delivered since inception (including our predecessors)
- 267MWe of energy and landfill gas generated by owned and operated energy plants
- $1 Billion bonding capacity with a per project maximum of $150 million
- $717.2 Million annual revenue in 2017
- Structured to Deliver Customer Value
- Over $5 Billion in energy solutions delivered since inception
- Public 2010
- NYSE: AMRC
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THE AMERESCO ADVANTAGE

Ameresco delivers the best value to clients through:

Independence, Flexibility and Objectivity
- No parent company
- No manufacturer/contractor affiliations
  - Competitive procurement for products and installation labor
- Flexible financing approaches
- Single-source provider

Proven Expertise
- Deep, diverse experience across industries and technologies
- In-house engineering and project management
- Fully integrated project development and implementation expertise
- Innovative solutions

Financially Strong and Stable
- $717.2 million annual revenue in 2017
- $2.5 billion project financing sourced and raised
- Over $5 Billion in energy solutions delivered since inception
- Continued growth generated through both new business and recurring revenue streams

Reputation for Excellence
- Acknowledged/Established/Well-known reputation for project performance and customer satisfaction
- Deliver immediate and long-term results
  - Energy savings
  - Financial savings
  - Carbon reduction/Sustainability goals
  - Resource conservation

Client-centric Solutions

Peace of Mind

Reliability

Confidence
LED STREETLIGHTING EXPERIENCE

• Leader in smart LED street lighting
  • 41 projects encompassing over 600,000 street lights completed, currently in construction or awarded (62% with smart controls) across the United States
  • Provide complete turn-key services, including GIS audits, condition assessments, street light acquisition assistance, tariff negotiation, LED conversion and smart network design, material procurement, installation, financing, and ongoing maintenance
LED STREET LIGHTING RETROFIT APPROACH

- Success starts with a plan
- Fixture selection process
- Cohesive project team
- Leverages economies of scale
- Safety
- Scalable process
- Masterful logistics plan and detailed schedule
- Close communication and customer collaboration
- Minimize community impact
- Negotiate favorable utility rates

- Top reasons for project failures:
  - Over-lighting
  - Use of unpopular color temperatures
• Contract Type: Design Build
• Project Size: $26.5 million
• Energy Savings: Estimated $22 Million through 2030
• Project Summary:

“The Council approved a $30 million plan to convert approximately 100,000 street lights to LED over the next two years – which will save the city a net total of approximately $22 million through 2030 in reduced energy and maintenance costs.”
• Contract Type: Energy Savings Performance Contract; Guaranteed Energy Savings
• Project Size: $15.8 million
• Energy Savings: $180,000 per month
• Project Summary:
  • Includes the retrofit or replacement of 20,281 roadway, underpass and decorative lighting fixtures with high efficiency LED fixtures, as well as upgrades to the lighting in six City of Tucson parking facilities to LED lighting with occupancy and light level (daylighting) controls. The project also includes the city-wide installation of the ROAM adaptive control system for all roadway fixtures.
TUCSON LUMINANCE SKY IMAGERY
GIS Audit & Condition Assessment
  • Over 330,000 street, alley, viaduct & tunnel lights

LED Conversion Design & Luminaire Selection
  • Re-engineer City lighting specification, photometric & lifecycle cost analysis

Convert over 270,000 Lights to LED

Infrastructure Stabilization Repairs
  • $30 million budget, informed by condition assessment

City-Wide IoT Network
  • Street light monitoring & control, integration with 311 and other City systems
CHICAGO

CITY-WIDE IOT NETWORK

• IPV6, 900 MHz mesh network
• Can support electric/gas/water meters, street lights & other connected devices
• Provides robust monitoring & control of street lights (City employing CLO strategy)
• APIs enable integration with City’s 311, legacy asset management, and ComEd billing systems (911 planned)

ESPC ANNUAL ENERGY SAVINGS

$1,522,629
THANK YOU

Your Trusted Sustainability Partner

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