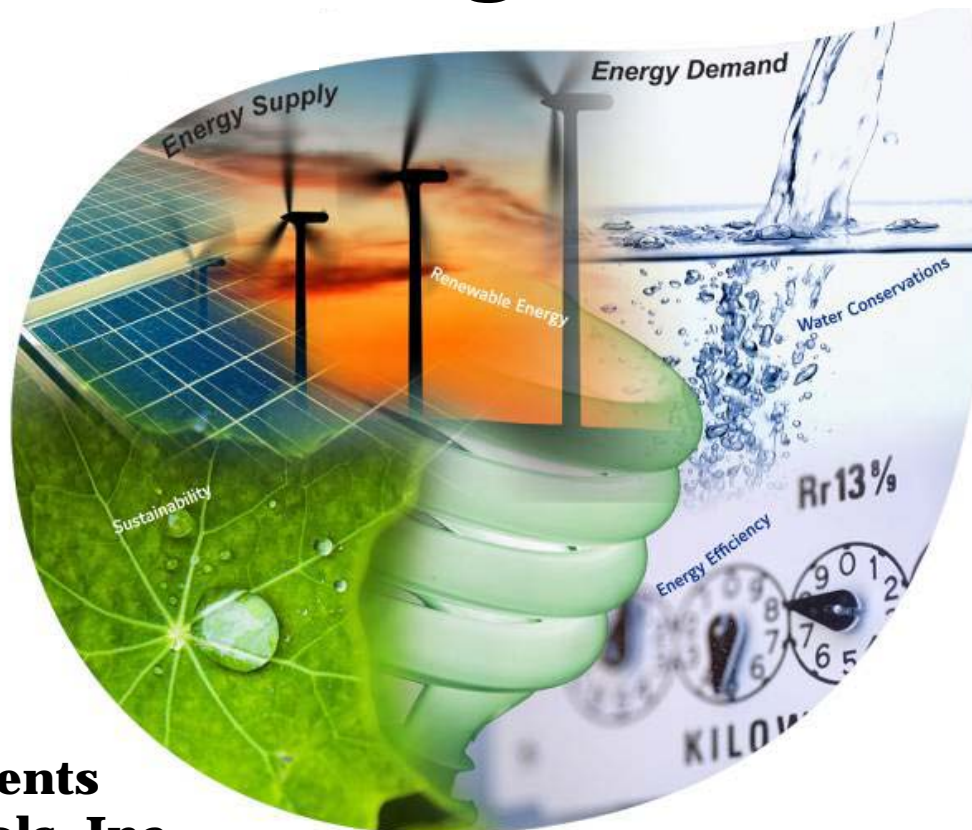




Maximizing Customer Benefits & Solutions through Smart Meters



Bill Simpson
Local Governments
Johnson Controls, Inc.

Smart Grid Definition

- A system of intelligent monitoring and controls that tie the power grid together in an automated network that makes the delivery of electricity more secure, reliable, economical, efficient and environmentally friendly
- Provides two-way communication between the utility and the customer so the utility can operate more efficiently and the customer can make informed choices about their usage

Meters + the Network

- Customers interacting with their utility through an Advanced Metering Infrastructure (AMI) and beyond!

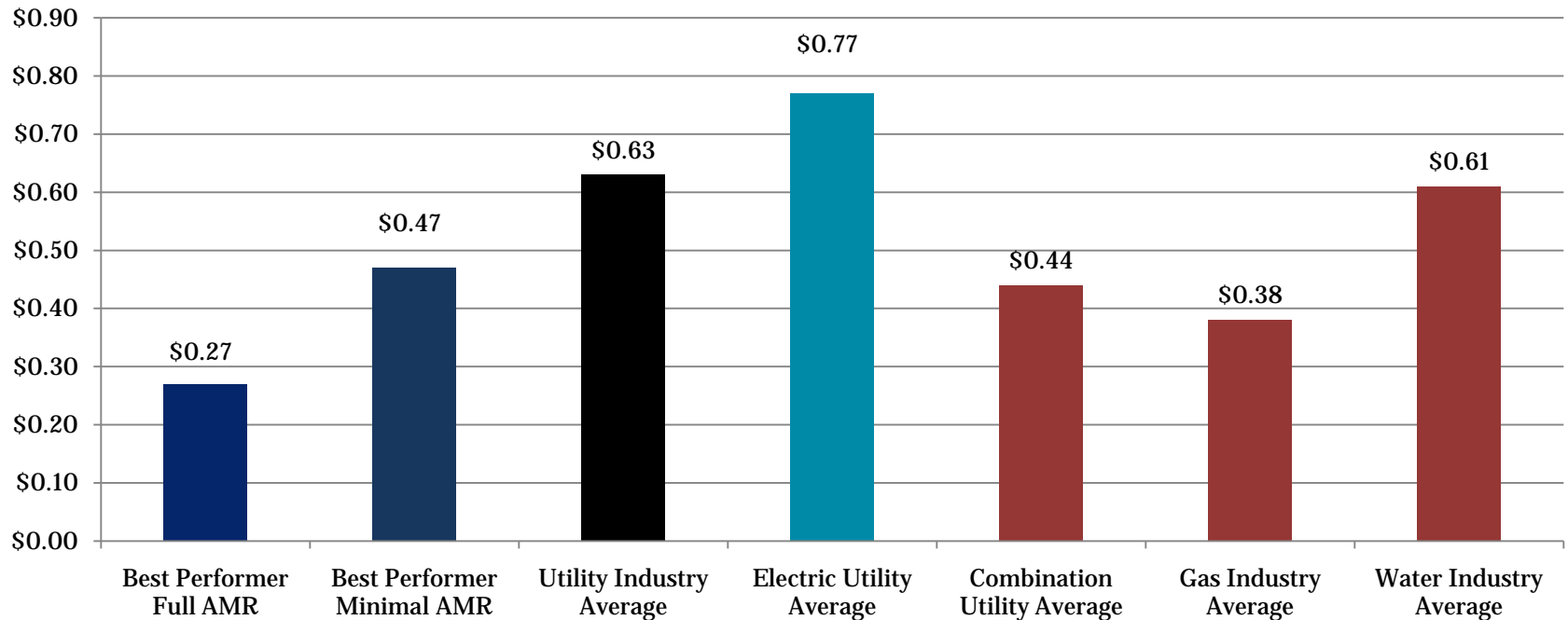


City's Costs to Read Meters

Cost Per Meter Read

Unit cost represents direct labor, contractor costs, overtime, and non-labor O&M costs. No capital costs or overhead were included.

Source: Meter Reading Profiles & Best Practices 2008, ©2008, The Ascent Group, Inc.



Energy Performance Contracting



A partnership between a municipality and an Energy Services Co. (ESCO) to identify, design, guarantee, install and manage capital investments when they create self funded opportunities by:

- ✓ Saving Energy, Water & Operational Costs
- ✓ Deferring Future Capital Expenditures
- ✓ Increasing Revenues

Energy Performance Contracting

Enabling Legislation – [FL Statute 489.145](#)

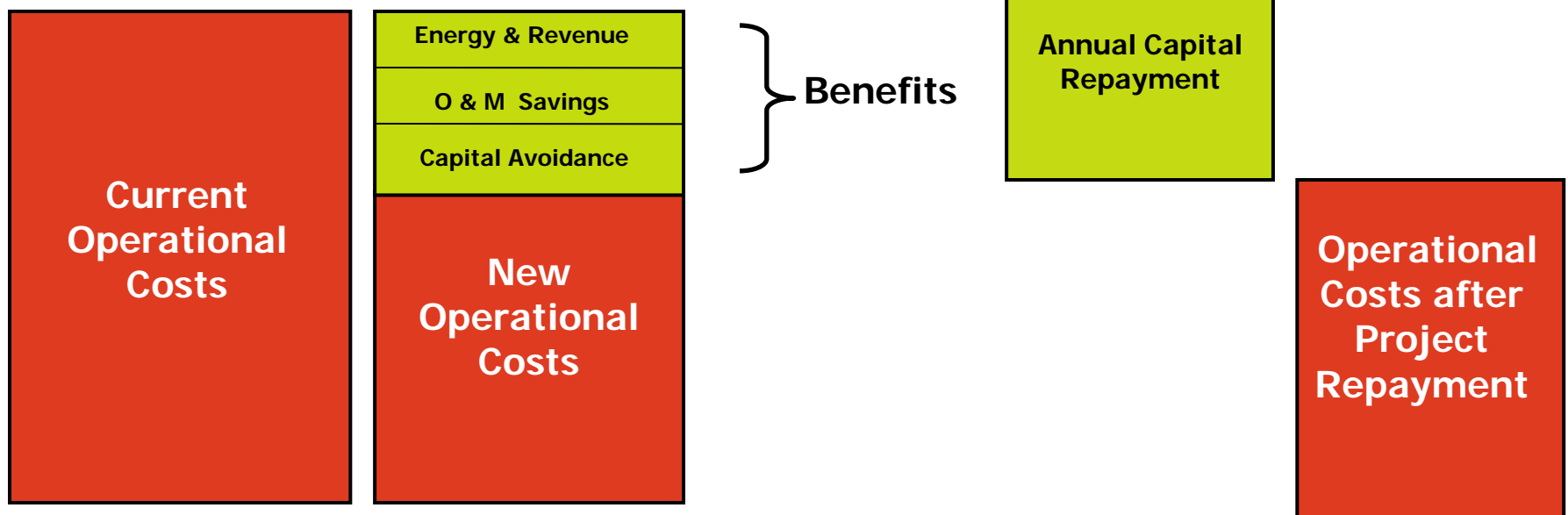
Endorsed by [FSU & the Network of Energy Sustainable Communities \(NESC\)](#)

Encouraged by DOE – [EPC webinar 3/3 @ 1:30](#)

Promoted by ICELI – [EPC webinar 4/19 @ 2pm](#)

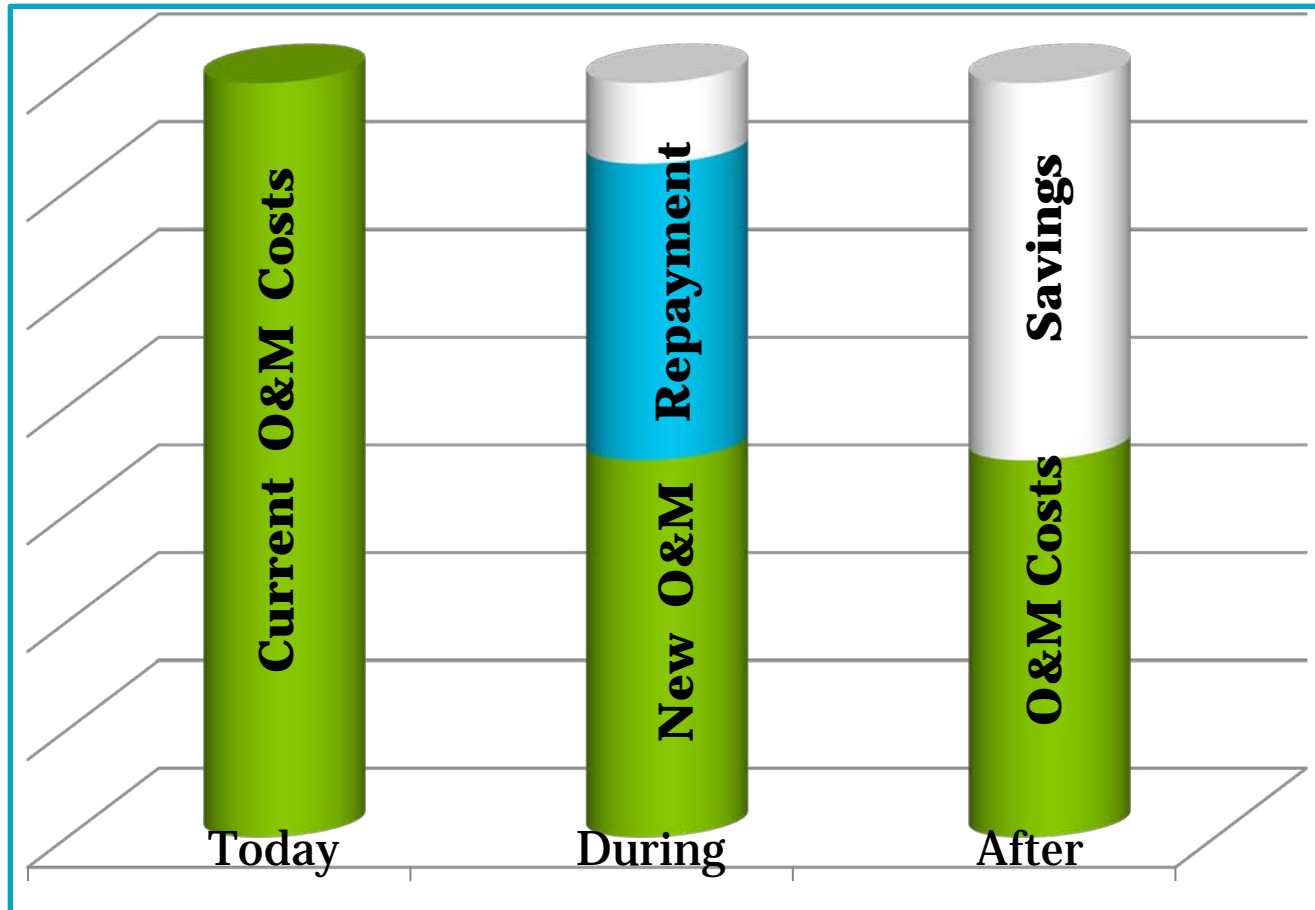
Energy Performance Contracting

How does Energy Performance Contracting Work?



City receives 100% of annual savings /revenue that exceed the guarantee

Beyond the Guarantee



City of Anderson, IN

Objectives of City

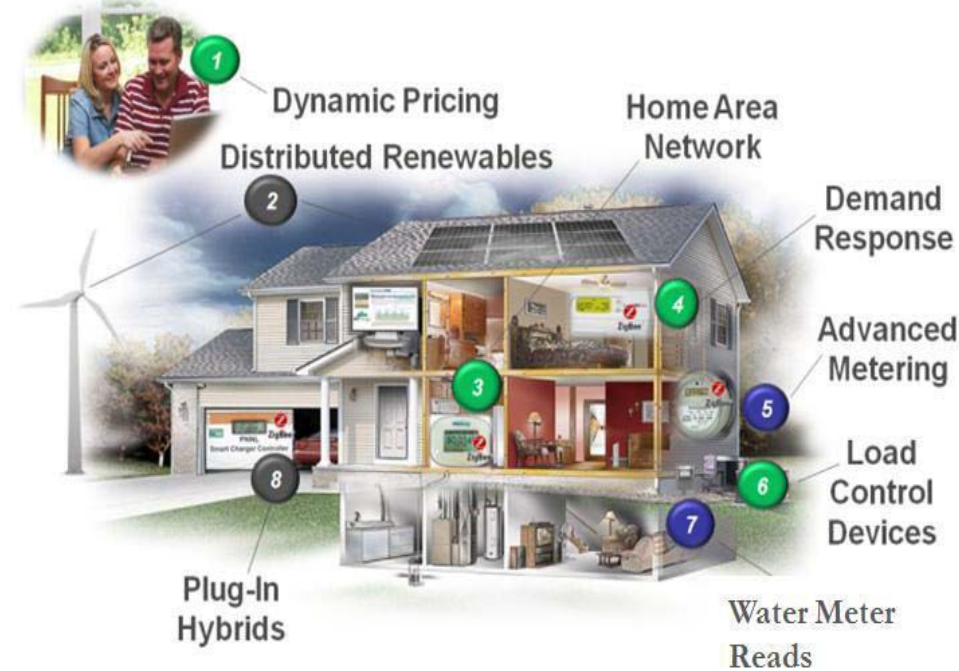
- Automatically read utility meters over a 182 square mile area
- Capture lost revenue
- Reduce operating costs
- Install a fiber backhaul
- Create a broadband utility
- Improve public safety

Electric Utility

- 37,375 new electric meters
- AMI system

Water & Wastewater Utility

- 23,683 new water meters
- AMI system
- Large water meter typing



Project Cost: \$21,200,000
***Guaranteed* Benefits over**
Term: \$40,900,000

“Benefits include integration with an outage management system to more quickly determine the location, extent, and cause of an outage to reduce restoration times. The remote disconnect/reconnect feature has saved more than \$100,000 so far in avoided customer premise visits. Water leak detection enables savings on both the utility and customer side of the equation.”



Developing the Future
of the City of Ocala



Joe Noel of Ocala Utility Services inspects newly installed smart meter. An AMI system of 53,000 electric and 25,000 water meters is now operational.

Florida Project Highlights

Health Care:
Bon Secours – St. Josephs Hospital,
Indian River MC,
Jackson Memorial,
Parrish MC,
Peace River MC
& Shands Healthcare

City Governments: Cocoa, Cocoa Beach, Edgewater, Hollywood, Miami Beach, Margate, N Miami Beach, Ocala, Opa Locka, Plantation, Tallahassee, Tampa & Venice

FDOT

Mac Dill AFB

Tampa Housing Authority

County Governments:
Brevard, Broward, Collier, Hillsborough, Sarasota, Orange & St. Johns

USGS

County School Districts:
Alachua, Baker, Bradford, Brevard, Broward, Columbia, Dade, Desoto, Dixie, Hamilton, Hardee, Highlands, Hillsborough, Lafayette & Polk

Higher Ed: FL Gulf Coast, FL International, FL State, Tallahassee Community College, Univ. of FL & Warner Southern

Sustainable Community

Jewish Federation of S Palm Beach Co.

Questions & Answers



Bill.Simpson@jci.com

813.347.6472