



# Look Who's Talking About Energy Efficiency

“The simple act of retrofitting these buildings to make them more energy efficient - installing new windows and doors, insulation, roofing, sealing leaks, modernizing heating and cooling equipment -- is one of the fastest, easiest and cheapest things we can do to put Americans back to work, while saving families money and reducing harmful emissions.”

President Barack Obama



# Look Who's Talking About Energy Efficiency

“Making our buildings more energy-efficient protects our environment, saves money, improves real estate values, creates jobs -- and could be the next big thing for Minnesota’s economy, with energy services companies, leading windowmakers and other manufacturers right here in our state.”

Senator Al Franken



# Look Who's Talking About Energy Efficiency

“By December 31, 2011, each state agency shall identify all major energy-consuming building systems in state-owned buildings under its custodial control that will reach the end of their useful life within the next five years.

“State agencies shall identify and implement best management practices and cost-effective energy efficiency and renewable energy improvements utilizing Guaranteed Energy Savings Contracts, the State Energy Improvement Financing Program, or other implementation and financing mechanisms that may be appropriate.”



Governor Mark Dayton,  
Executive Order 11-12



# But Enthusiasm Is Not Universal

“By 2012, incandescent light bulbs will be no more. Fluorescent bulbs are more polluting because of their mercury content.... It’s almost as if you have to call the haz-mat team out to your home.

“ I was outraged that Congress would want to substitute its judgment for the judgment of the American people. It struck me as a massive Big Brother intrusion into our homes and our lives.... Government has no business telling an individual what kind of light bulb to buy.”

Representative Michelle Bachmann



# But Enthusiasm Is Not Universal

Policy bias in favor of addressing supply side issues:

- Monopoly power
- National security
- Environmental protection
- Public safety
- Research and development
- Access to resources on public land



# Performance Contracting Legislation

- Federal
- State
- Municipal
- Schools

# Performance Contracting Legislation

Minnesota	Minn. Stat. §16C.144; Minn. Stat. §471.345, Subd. 13
Illinois	50 ILCS 515/5; 110 ILCS 62/5; 110 ILCS 805/5A
Wisconsin	WI Stat. § 66.0133
Indiana	IC 36-1-12.5
Ohio	ORC 156.01
Michigan	MCL 380.1274a
Iowa	No enabling legislation



# Demand Side Management Programs

## State-run performance contracting programs

- E.g., Minnesota Guaranteed Energy Savings Program:

<http://mn.gov/commerce/energy/topics/financial/Energy-Savings-Programs/Government/Guaranteed-Energy-Savings-Program>

## City-run performance contracting programs

- E.g., Retrofit Chicago:

[www.cityofchicago.org/city/en/progs/env/retrofit\\_Chicago.html](http://www.cityofchicago.org/city/en/progs/env/retrofit_Chicago.html)

## Utility programs

- E.g., Wisconsin Focus on Energy Program: [www.focusonenergy.com](http://www.focusonenergy.com)

# Conditions Should Be Good For ESCOs To Succeed

- Severely deferred maintenance
- Retirement of skilled craftspeople plus need for job creation
- Depressed government revenues
- Perceived popular support for energy efficiency
- Serves goal of reducing carbon footprint
- Great new technology available
- Financing constraints



# Countervailing Forces



- Flat or declining energy costs
- Reluctance to enter into longer term contracts
- Low hanging fruit has been harvested already
- Political instability erodes support for energy
- A few troubled projects have given performance contracting an unfavorable image
- Depressed construction market has led to increased competition

# A Few Observations On Trends



## Longer term contracts?

- Newer legislation allows has extended the allowable guarantee term (Ohio v. Indiana)
- But customers are reluctant to commit to longer terms
- And lenders are skittish about them too

# A Few Observations On Trends (cont.)

## Measurement and verification of savings

- More stipulated savings
- Less money being spent on M&V
- Some third-party M&V
- Early termination of M&V (and guarantee)

# A Few Observations On Trends (cont.)

New measures qualify for treatment under state statutes

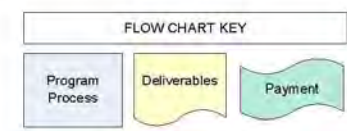
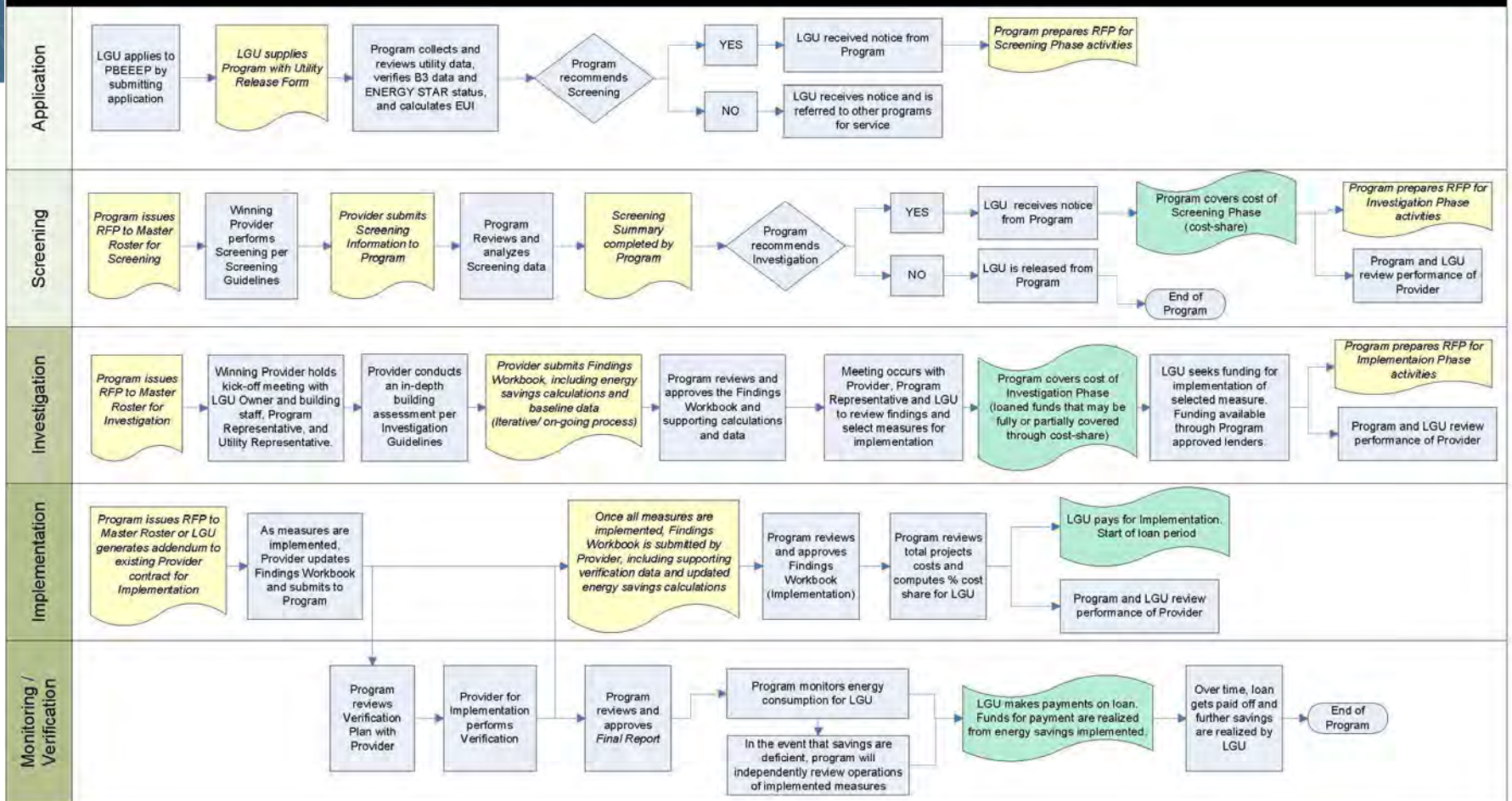
- Water meters
- Renewable energy
- But hesitation to lengthen guarantee period hampers deeper, more complex retrofits

## A Few Observations On Trends (cont.)

- Open book pricing
- Lower margins
- Master contracts with customer friendly terms
- Extended sales cycle

Bottom line - more risk on ESCOs for less margin

# Standard Program Flow Chart





# Obstacles To Success

- Emphasizing lowest first cost over best life cycle value
- Focusing on quick payback projects
- Undervaluing the long-term relationship between ESCO and customer
- Reluctance to count operational savings, especially O&M savings that result in staff reductions



# The Key To Success Of Performance Contracting Industry

Accurate robust M&V of energy and operational savings over the entire guarantee period



Weak, poor or nonexistent M&V will kill performance contracting

# Robust M&V Bucks The Trends

- Customers are willing to pay for equipment but not for M&V
- Utilities are following mandates but don't want to pay for M&V
- ESCOs don't make money on M&V and would often prefer to see customer terminate M&V (and thereby cancel the guarantee)
- Legal requirements for M&V are not rigorously enforced

# Benefits Of Solid M&V

- Accurately assess energy savings
- Reduce uncertainty
- Monitor equipment performance
- Identify additional savings opportunities
- Improve operations and maintenance
- Create appropriate basis for needed adjustments
- Ensure compliance with laws and regulations

# Characteristics Of Solid M&V

- As accurate as budget will allow
- Complete and reliable calculations that cover all aspects of project
- Conservative
- Consistent
- Transparent

# Consequences Of Poor M&V

- Customer doubts savings goals have been achieved
- Customer fails to meet energy budget targets
- Litigation ensues



# Accentuate The Positive

- Remember that without guaranteed savings validated through good M&V, performance contracting is no different from traditional contracting
- Advocate for sound engineering and robust M&V over the life of the contract



*thank you*

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