



# Using Energy Savings Performance Contracts

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- What is Performance Contracting?
- Ohio Legislation
- Pro's and Con's
- Examples
- Questions

# Procurement Options

- ***Design/Bid/Build = Hard Bid***
  - *Standard approach*
- ***Design/Build***
  - *Varies by state*
- ***Performance Contracting***
  - *(design/build/finance)*

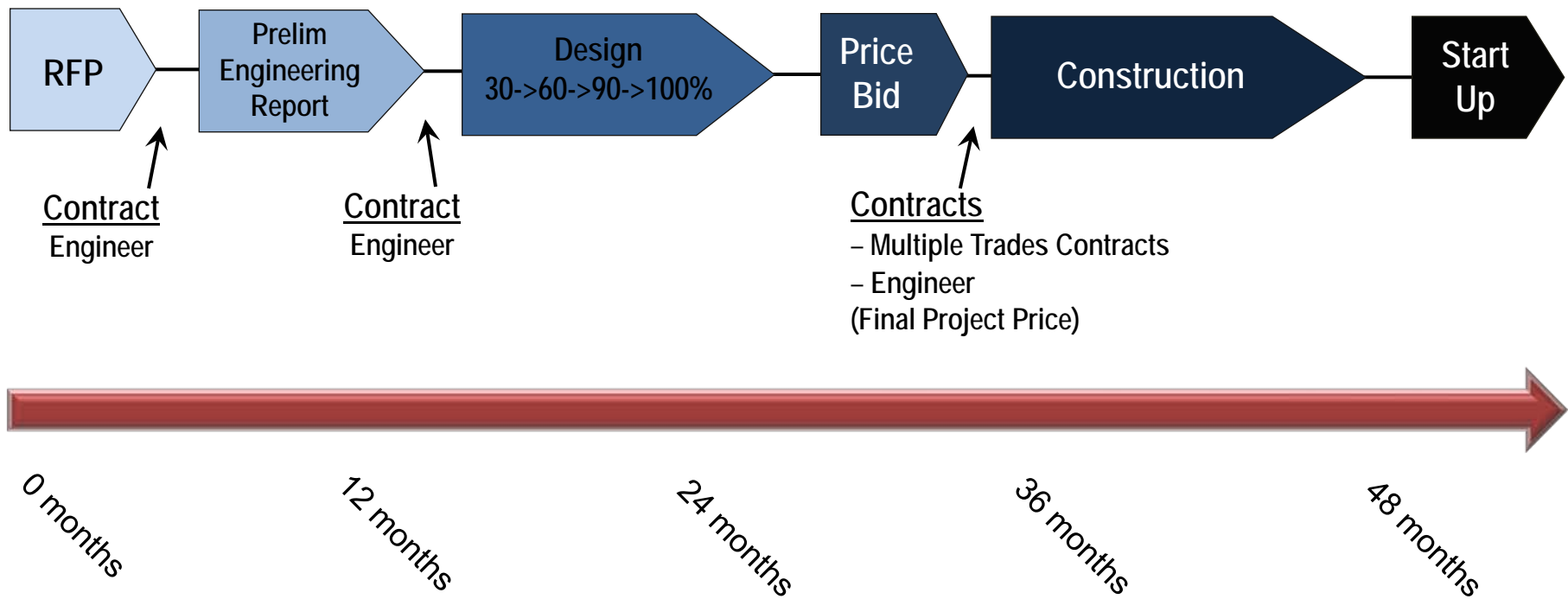


# What is Performance Contracting?

- One party providing all engineering and construction including financing
- Intent is to improve infrastructure to improve energy efficiency while reducing operating costs
- Guaranteed
  - Savings, Performance, Price.
- Savings offset costs
  - Energy & Operational
- Qualification Based Selection

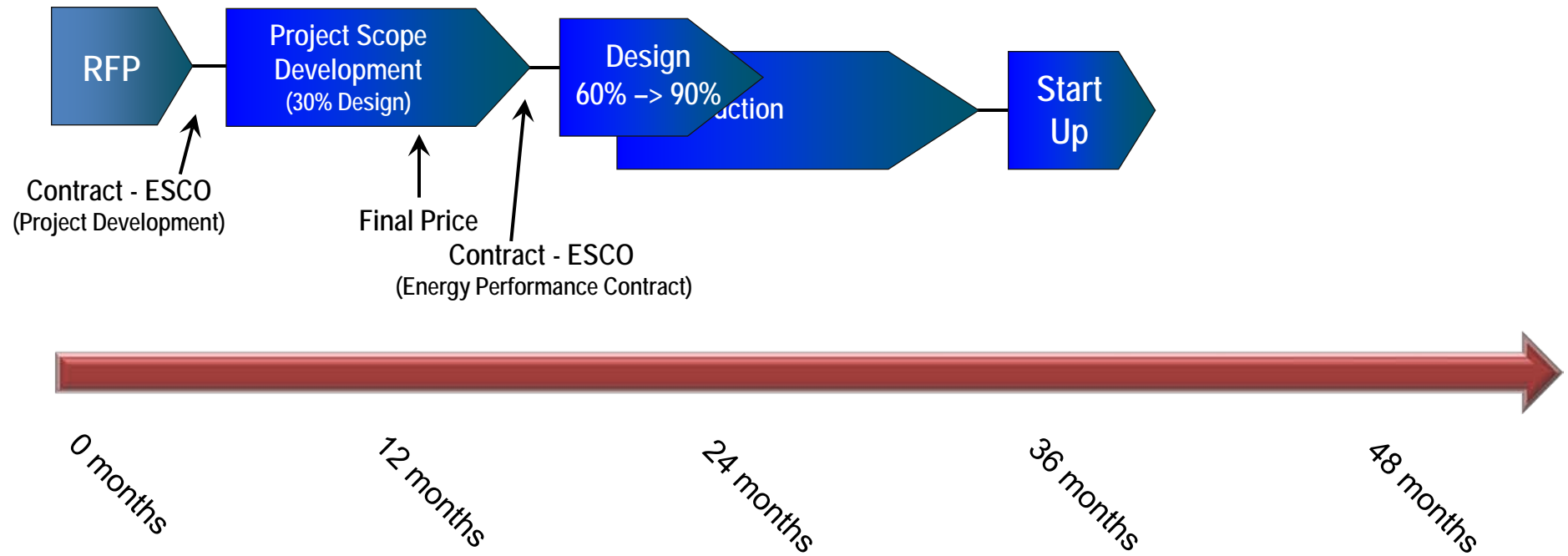
# What you do now.

## Design-Bid-Build

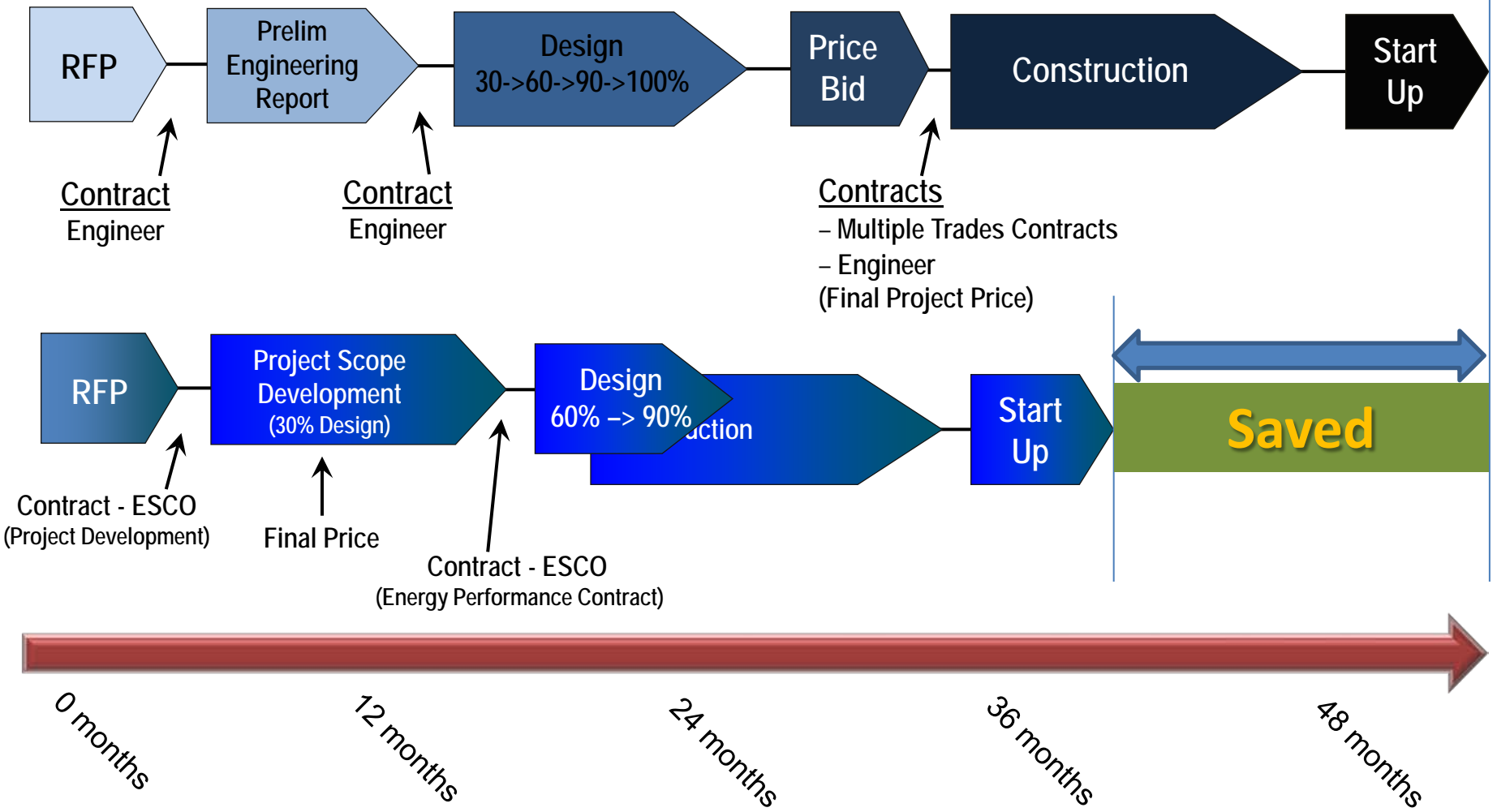


# What you could do.

## Design-Build



# Comparison



# National Perspective

- 2010 - \$6 Billion dollar business among 53 companies
- 75% in institutional - (K-12 schools, universities, hospitals, and state, local, and federal governments)
- 14% on site power generation
- Increasing Municipal Utility market

*Source: Market Trends in the U.S. ESCO Industry: Results from the NAESCO Database Project - Lawrence Berkeley National Laboratory, NAESCO 2010*



- Ohio Revised Code
  - 3313.372 - School Corporations (passed 10-1-1985)
- - 717.02 – Municipal Corporations
  - 505.26.4 - Townships
- Installment Payment Contracts for energy conservation measures
- Savings are Defined
  - Energy = Any Resource
  - Water, Electricity, Natural Gas, Steam, Air, Chilled Water
  - O&M Cost Reductions = Labor or Materials

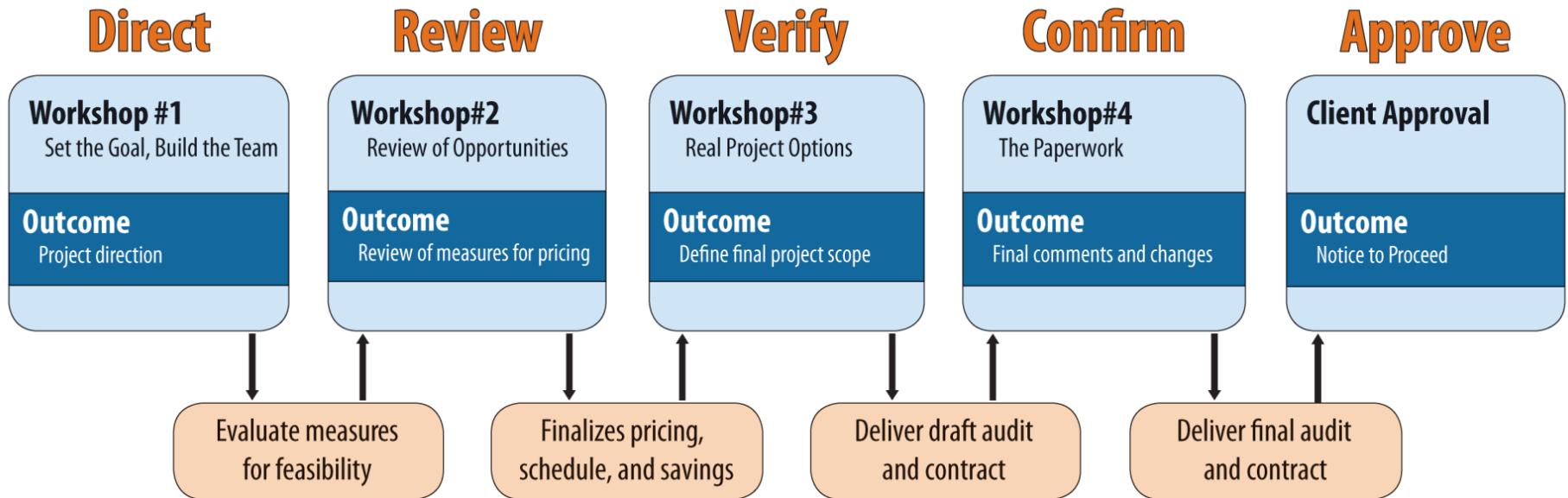
# Why do it?

- Single point of contact
- Accelerate a project
- Control over contractors/technology
- Best value vs. lowest price
- Alternative financing
- Cash flow management

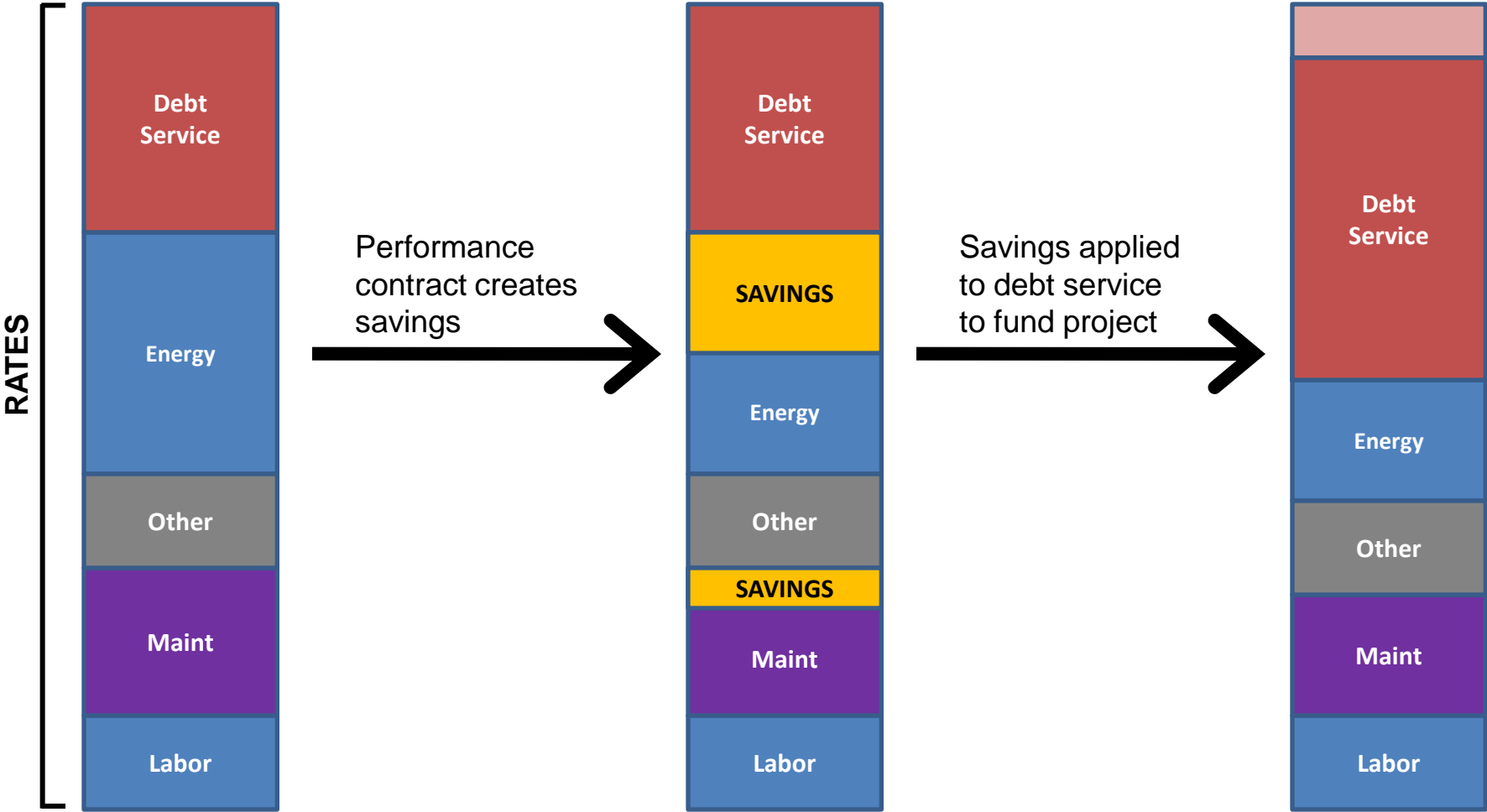
# Why Not?

- Very small projects (<\$100K)
- No needs
- Comfortable w/DBB
- Project already designed

# Project Development Process

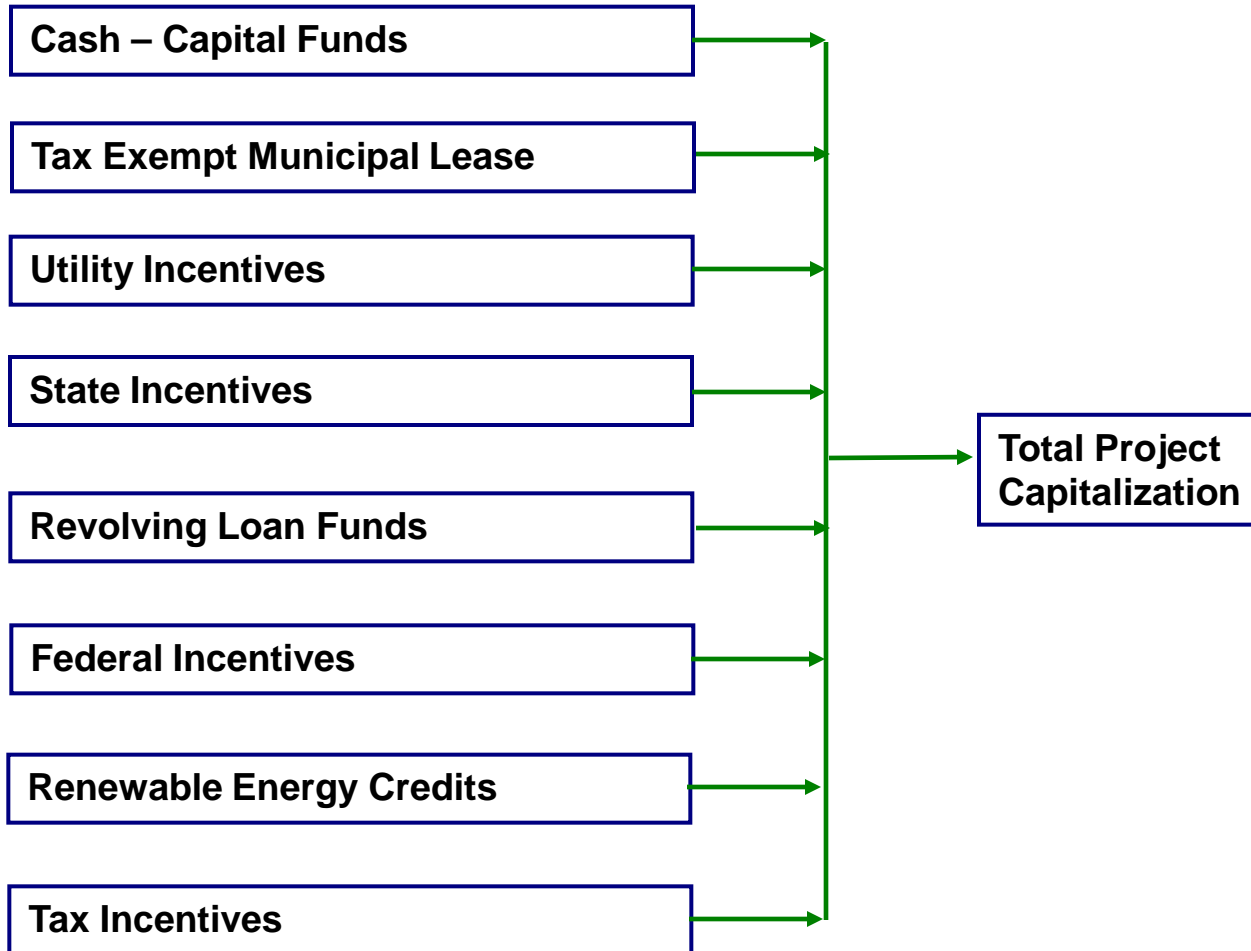


# Where does the money come from?



# Project Financing

**New**



# The Guarantee

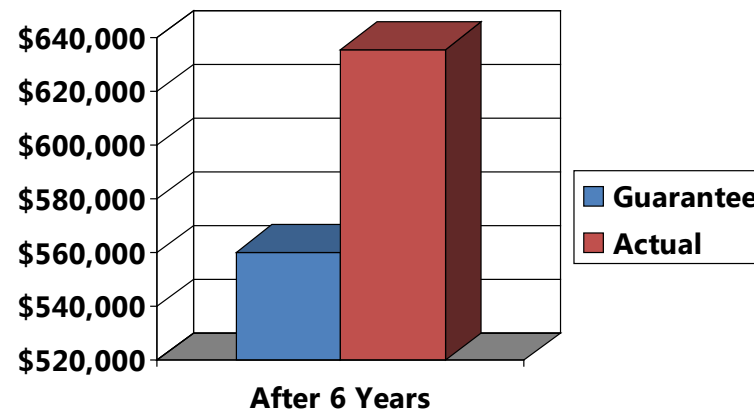
- Energy service company guarantees annual energy savings
  - Annual Reconciliation
  - Calculated from agreed upon factors:
    - Utility rates
    - Operational conditions (hours, flows, etc.)
    - System or equipment efficiency
  - Method of measurement determined before construction
- The guarantee changes the behavior of the project team from short-term to long-term focus.

- Equipment replacement – (motors, pumps, electrical)
- Plant rehabilitation (windows, roof, lights, etc.)
- SCADA
- Biosolids
- Underground Pipe
- Lift Stations
- Biogas

# City of Winchester, IN

## 2 MGD Wastewater Plant

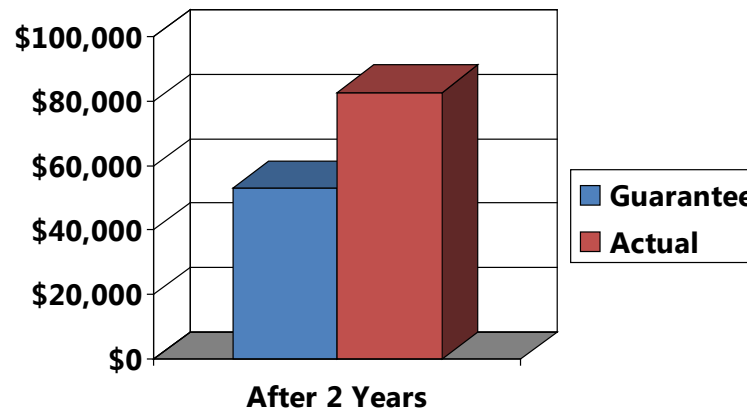
- Fine bubble diffusers
- Variable Speed PD Blowers
- DO Control
- \$0.9M project



# City of Wapakoneta, OH

## 4 MGD Wastewater Plant

- SCADA Upgrade
- DO Control
- VFD's on pumps
- \$0.7M Project



## 175 MGD Wastewater Plant

- Raw water pump rebuild
- \$6.8M Project



- Performance contracting is alternative procurement that offers
  - Financing
  - Long term approach
  - Collaborative development
  - Guarantee

# Questions?

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