



Session 411: Mastering maintenance with the principles of good debt

Using Energy Performance Contracting to finance backlog maintenance, lifecycle replacements and fund asset expansion

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Good Debt vs Bad Debt

Using Energy Performance Contracting to finance backlog maintenance, lifecycle replacements and fund asset expansion

espirito corp

AMERESCO
Green • Clean • Sustainable

Key take-homes from today

Leave today with:

- Another way to address backlog maintenance, rising utility costs and lifecycle replacements
- Save money for more optimal deployment within the organization
- Improve service delivery for tenants

AND

- De-risk all of the above for the Non-Profits

Introductions



Stuart Galloway leads the Capital and Infrastructure Project Solutions national practice looking at projects across Canada and provides all the necessary advice and expertise of over 25 years in Infrastructure and project finance. Stuart has worked closely with the Non-Profit housing sector across the entire continuum since 1996, working in both the UK and Canadian markets. Stuart has a passion for creating affordable housing solutions and is actively involved across the Country with various organizations that look to him to assist in realising their project ventures, drawing upon both his technical and finance skills to offer solutions and deliver them.




Joe Valente is Vice President, Business Development for Ameresco Canada. Over the last 20 years, he has assisted clients in the Non-Profit, Municipal and Higher Education sectors in


identifying and addressing their most pressing facility needs through guaranteed capital creation strategies designed to ensure the long term viability of their assets. Joe has helped to develop and implement facility improvement strategies throughout North America, using energy and operating savings to fund these improvements.



"Places Enabling People"




Landscape




Significant Facts About the Housing Non-Profit Sector in Ontario


- A large NP sector in Ontario, operating circa 223,000 units of long term affordable housing:
 - Number of Private NP units: 83,165
 - Number of Municipal NP/Local Housing Corporation units: 140,720
- Number of households on NP waiting lists: over 156,000
- ONPHA represents 70% of these units across 770 members
- The sector is diverse and NPs differ in resources and capabilities
- Sector is fragmented, 70% managing less than 100 units
- Sizeable assets across the collective
- Ageing stock with the majority built before mid-80s
- Sector faces uncertainty over its future sustainability



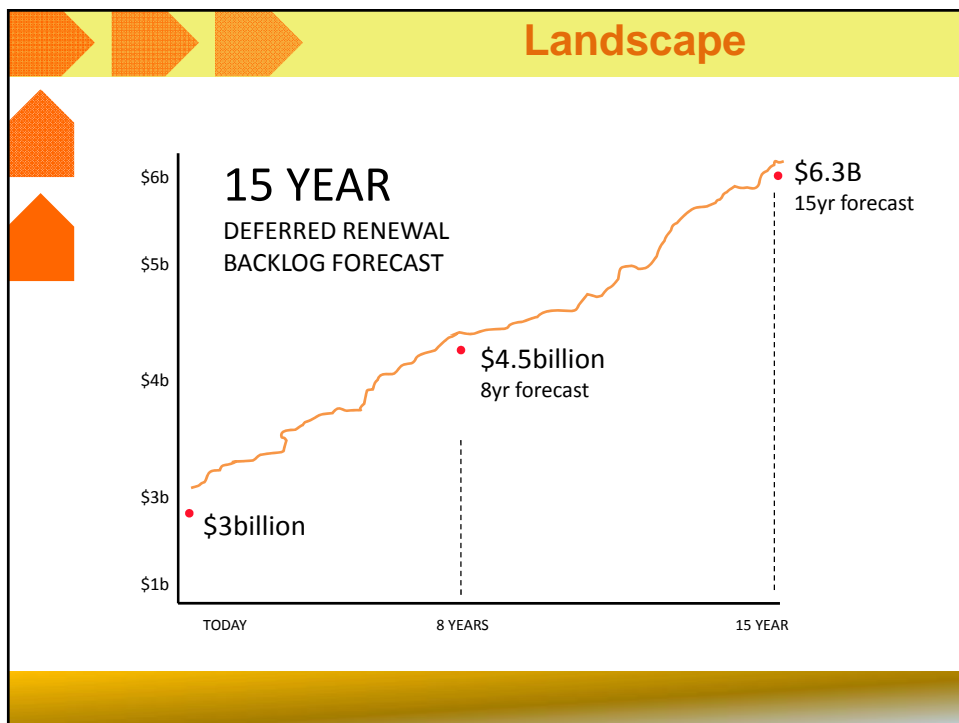
Landscape



Common Challenges Facing All



- Increasing demand for good quality housing supported by growing waiting lists
- Demand for greater diversity of affordable housing
- Aging units and mounting backlog repairs Double by 2030!
- Operating costs which outstrip rental income
- Significant concerns over the potential impact of ending operating subsidies
- Rising energy cost Operating cost pressures






Consequences

The "Do Nothing" Option


- Health & Safety, increased risks and tenant dissatisfaction
- Building system failure, facility closures, lost revenue, displaced tenants
- Sub-optimal, inefficient, carbon intense building environments with comfort issues for tenants
- Building fatigue, reduced community pride, increased vandalism, increased operational costs, hampering of future growth
- Facility functionality, unable to meet trending demands, waste in the "system"
- Lost opportunity to increase present value of assets
- Wasting money on utility costs that could be spent by the NP

Priorities



- Improve energy performance
- Save money
- Measurable benchmarking and performance monitoring
- Develop efficiencies
- Comply with Regulations
- Produce an auditable trail

Catalyst for Change?



Financial Risk

- Increased financial pressure to fund emerging and existing needs...
 - New housing to meet demands
 - Unfunded deferred renewal growing
 - Lifecycle replacements

Quality of Housing Asset Condition Risk

- Decline in the quality of affordable housing environments
- Avoidance of closures

Creation of Jobs from within the Community

- 15,000-30,000 new jobs
- Reduce the demand

Mortgaging our Future

What If?

Solve Problems, reach Desired State

- Use operational cost savings to generate capital
- Solve the maintenance problem that has been accumulating for decades
- Reduce energy demand, consumption and CO₂ emissions
- Accelerate the Housing Agenda Using new technology to create more comfortable, more reliable accommodation
- Reduce our waiting lists, give people hope of advancement

What If

.... We could do all this within our current spending parameters?

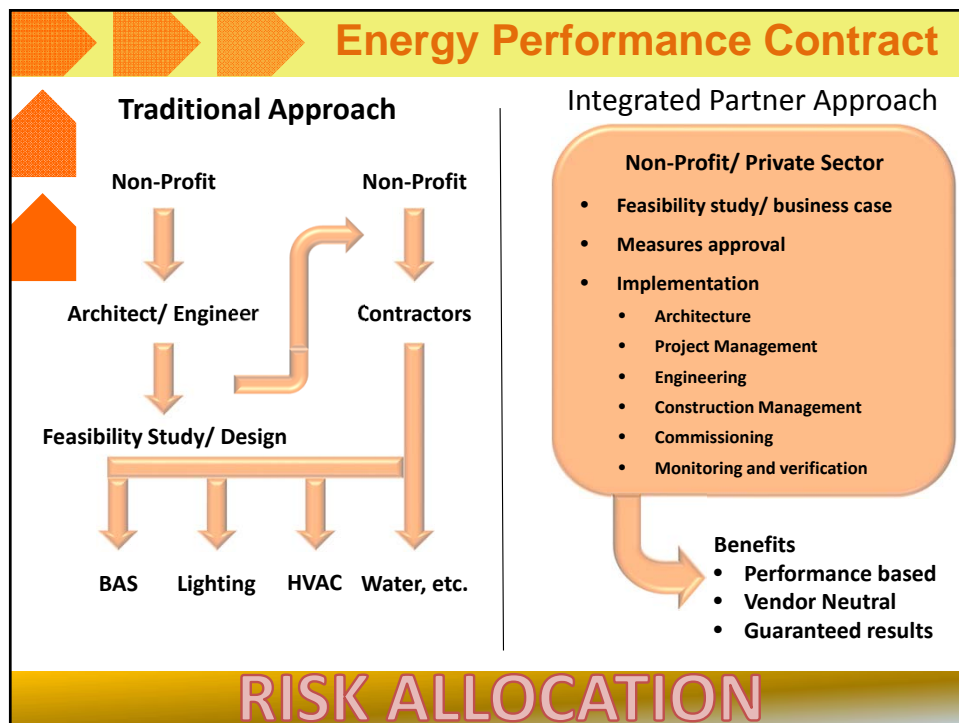
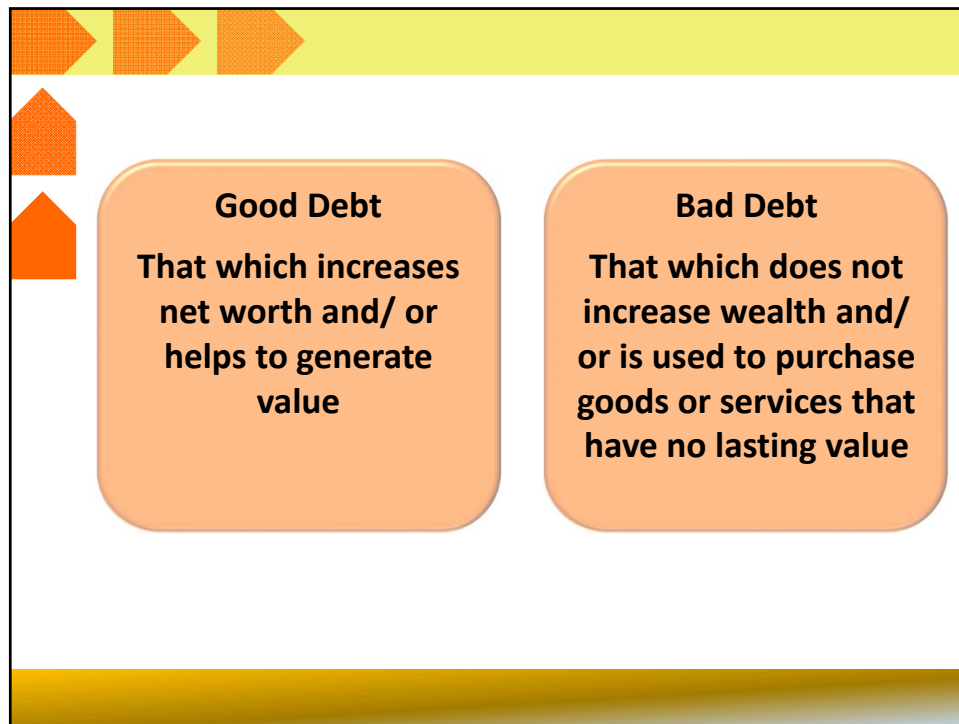
Plan to Succeed

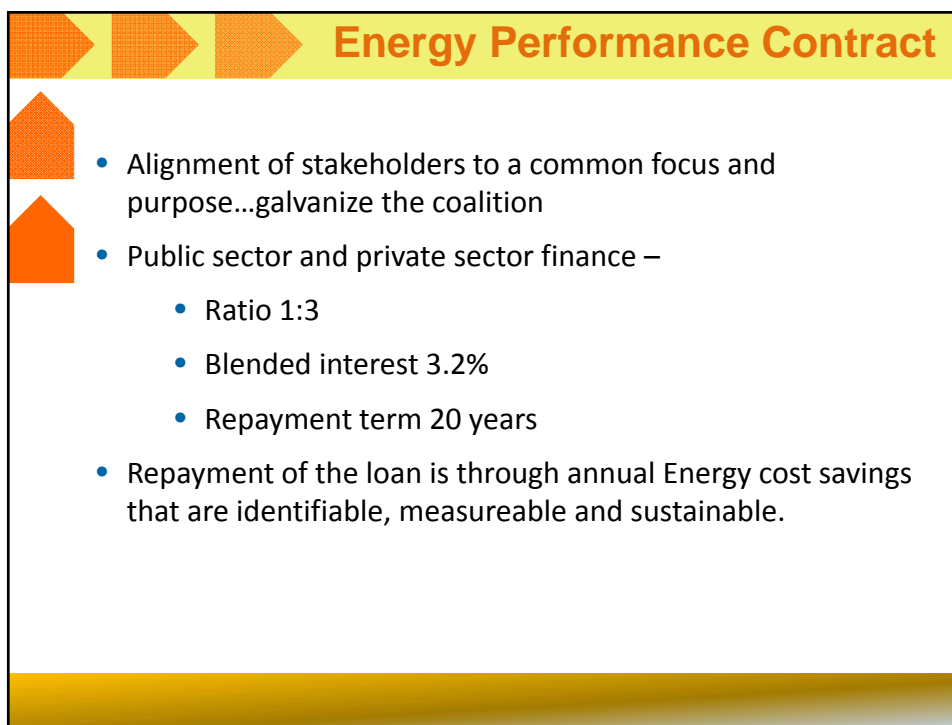
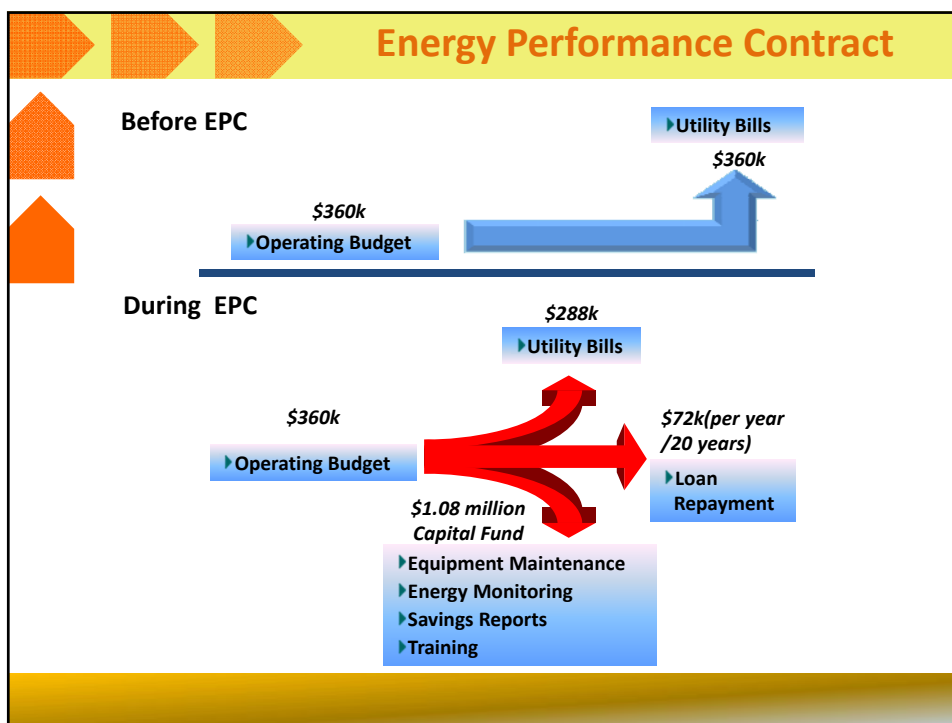
Principle Leverage– Energy Performance Contract

- Identify and measure operational and energy cost savings potential
- Implement energy savings measures; lighting, HVAC, water conservation, waste reduction, power generation, systems management



Additional Incentives

- Leverage and bundle capital creation strategies
- Look at methods to generate capital through existing operational budget
- Joint initiatives, collaboration






Real Examples



Aim

- Reduce energy consumption
- Improve building conditions
- Reduce the backlog of capital repairs
- Reduce carbon emissions

Used the energy savings to finance a significant portion of the capital costs. In priority:

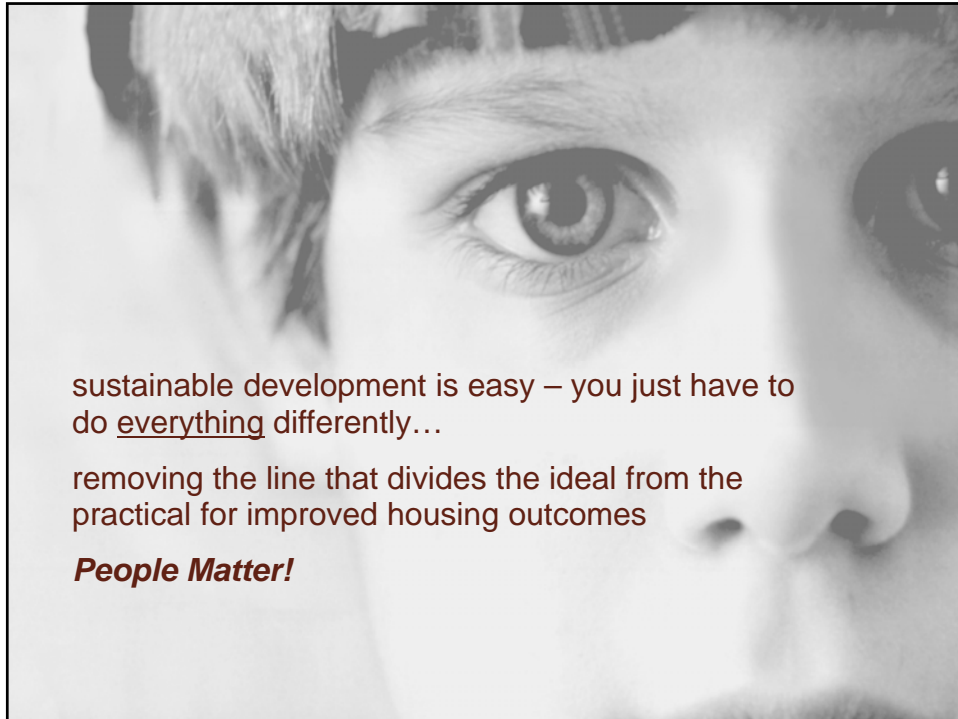


Real Examples

Work included:

- Retrofit lighting (both in-suite & common areas)
- Building systems replacement and enhancement – heating and hot water boiler replacement & HVAC system enhancements
- In-suite domestic water (water conservation)
- Building envelope work, such as window retrofits and door replacement
- Balcony repair/replacement
- Security system improvements
- Toilet and appliance replacement (energy efficiency)
- Kitchen and bathroom improvements
- Lobby and corridor refurbishment
- Playgrounds, soccer fields, landscaping




sustainable development is easy – you just have to do everything differently...

removing the line that divides the ideal from the practical for improved housing outcomes

People Matter!

Real Examples




Toronto Community Housing

TCHC
 Project Scope – 10 Developments
 Project Value - \$60 million
 Timeframe – 4 Years
 Annual Savings - \$1.1 million pa
 Potential Capital Fund - \$20 million

Tenant engagement is a vital component of the Building Renewal Program. Tenants contribute their ideas so that priorities can be set within the renewal section of the Building Renewal Program.

BC Housing
 Project Scope – 2,865 units
 Project Value - \$62 million
 Timeframe – 3 Years
 Annual Savings - \$1.1 million pa
 Potential Capital Fund - \$20 million



BC Housing



Why the Private Sector?

Private sector makes it safe:

- Tried and tested expertise, practical experience, what produces biggest savings
- No up-front costs for NP – surveys, design, build, measurement
- Performance Risk – Private sector ensures no project cost overruns and is responsible to ensure that building systems operate to intended design and operation
- Construction Risk – Private sector is responsible to bond the entire project cost that will mitigate any financial risk between main contractor and the project sub-trades and product providers.

Why the Private Sector?

Private sector makes it safe:

- ***Performance energy saving guarantee to repay capital loan – private sector guarantees and is responsible to ensure the energy savings generated each year meet loan obligations. If there is a savings shortfall the private sector bridges the gap and pays the shortfall.***
- Identification and application for Grant funding
- Protocols/ reporting to audit and measure financial performance to ensure the projects are performing

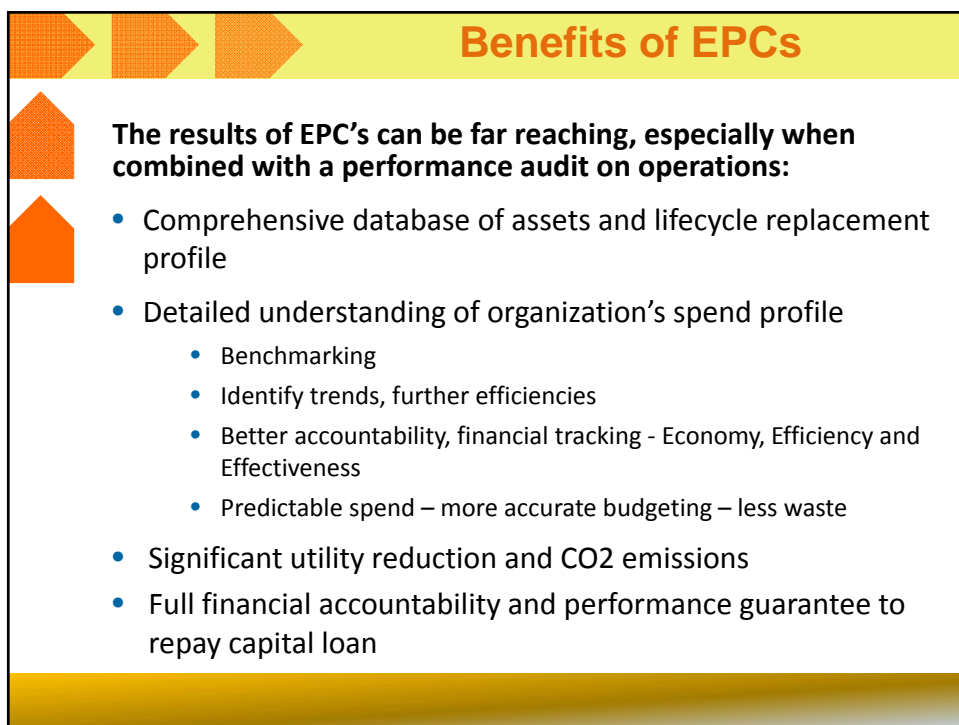
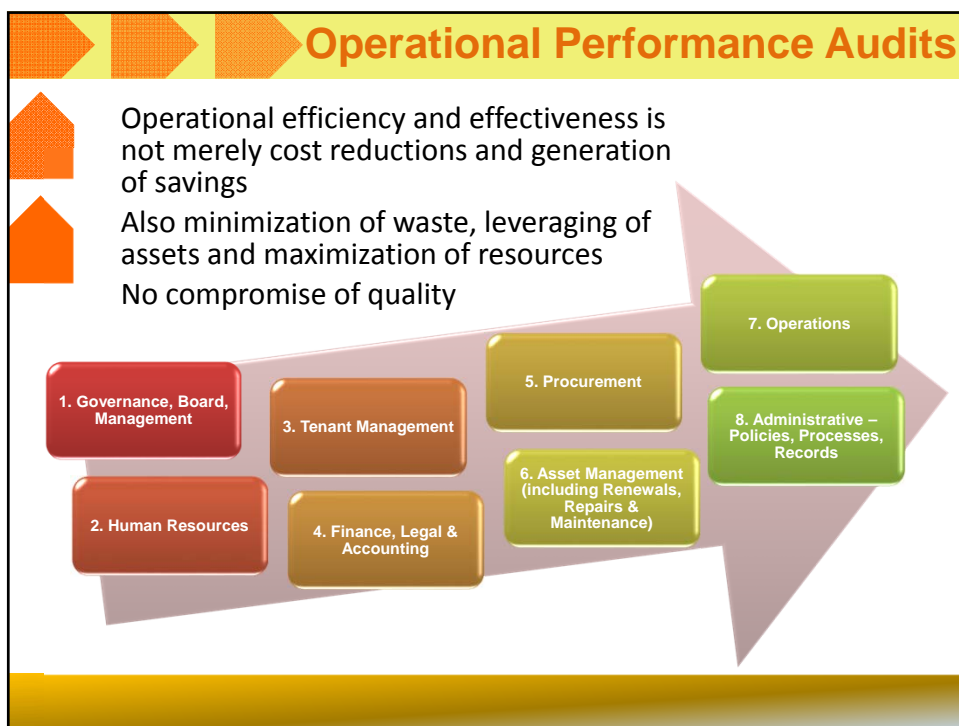
Important: The NP remains in full control of all decisions: sites selected, what project measures are selected, products, sub trades etc...

Additional Incentives

Leveraged and Bundled Capital Creation Strategies:

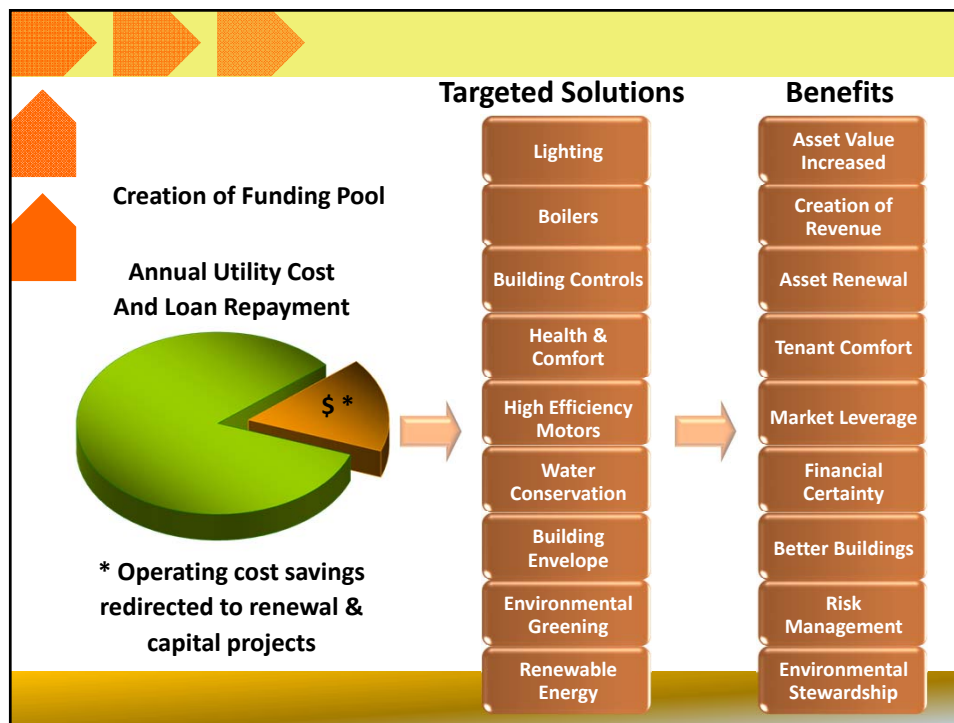
- Energy Optimization
- Renewable Solutions
- Maintenance Optimization
- IT/Communication Solutions
- Disposition Strategies
- Redevelopment Strategies
 - Consolidation
 - New Facilities
 - Repurposing Facilities
 - JVs and Project bundling
- Operational Performance Audits
 - P2P efficiencies
 - Governance
 - Finance and trend analysis





Benefits of EPCs (continued)

- Provide an opportunity to assess performance trends against predefined measures
- Offer opportunity to introduce course corrective measures on a timely basis
- Identification of areas of strength and enable organization to build on these
- Enable identification of direct savings as well as process efficiencies from which plans to implement these can be developed
- Assessment of key asset performance indicators, tenancy indicators and operational indicators as well as benchmarking against peer groups
- Better quality, more reliable housing stock
- Safe and healthy tenants
- ***Significant reduction in deferred renewal challenge***



**“We can’t solve problems by
using the same kind of thinking
we used when we created them”**

Albert Einstein



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