

## New Trends in Marketplace

**Steve Morgan**  
**Energy Performance Contracting for PHAs**

NAHRO 2008  
 San Antonio, October 27

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### Recent Changes, Increasing Opportunities

- 2005 HUD Operating Fund Regulation:
  - Integration of Asset-based Management/Asset Planning
  - Additional Audit, Measurement & Verification Vigilance
- 2005 and 2007 Legislation re: 20-Year Contracts
- Hope VI - Green Requirements
- New Technologies & Outside Incentives:
  - Solar, Co- & Poly-generation (CHP), Demand Response
- PHAs/HUD as Energy Services Innovators in Residential Sector

*Integrity - Innovation - Independence - Flexibility*




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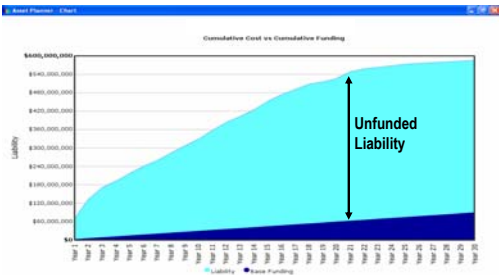
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### Asset Rule Consequence: Visible Unfunded Liability



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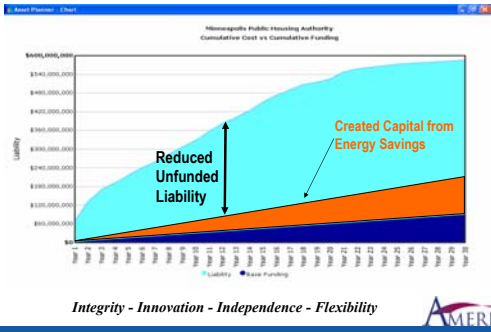
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## Energy as Strategy to Reduce Unfunded Liability




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## Implications of 20-year Contracts

- Leverage New Technologies & Capital Measures with Longer Paybacks (e.g., roofs, windows)
- Additional Phases to Existing Contracts, to leverage additional opportunities
- More Significant Restocking, Maintenance Strategies
- Life Cycle Cost Analyses
- Additional Savings Measurement & Verification Vigilance: Longer Terms, More Attributes, Changing HUD practices

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## New Technologies

20-year contracts + availability of state and local incentives make it possible for PHAs to adopt advanced technologies.

- Combined Heat and Power
- Photovoltaics
- Architectural Wind
- Solar DHW revisited
- Demand Response



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## Emerging Revenue Streams for PHAs

- ▶ **Carbon Offsets: 2009 Cap & Trade Legislation**
  - \$20/T= .03/KWH in value per year
  - Available 2011?
- ▶ **Demand Response Payments**
  - Also known as Future Capacity Market
  - \$3.50/KW/Month in New England today
  - Payment for demand reduction on same playing field as new supply
- ▶ **Renewable Energy Credits**
  - Associated with Renewable Energy Portfolio Standards
  - Incentives set by State PUCs to encourage PV, wind, biomass electric

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## Emerging Revenue Streams (2)

- ▶ **Regional Greenhouse Gas Initiative (RGGI)**
  - In NE, payments at auction for non-utility carbon reductions
  - First auction raised \$32 M in New England in September
- ▶ **Enlarged System Benefit Charge Budgets**
  - California, NE, NY expanding utility incentive programs
  - Can pay for 20% of typical EPC investment value
- ▶ **White Tags**
  - Payments for Other Pollutant Reductions (nitrous oxides, particulates, sulfur dioxide, etc)
  - In effect in Europe, not yet here

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## Impact of New Revenue Sources, Rate Escalations, 20 Year Terms for Energy Performance Contracts

- ▶ **Collectively these impacts can Double or Triple the Size of EPCs**
- ▶ **May be equivalent of 3 years of Capital Fund Appropriations at many agencies**
- ▶ **Also sets stage for Multi-Phase Financings as Rates Escalate**

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## PHAs as Energy Innovators

- City projects involve HUD-assisted, private housing
- HUD working to aid local and city initiatives: EPC incentives like those in public housing are needed
- HUD's attempt to introduce these incentives was cut short in 1994
- EPC incentives for Assisted Housing in 2008 legislation from House Financial Services Committee
- PHAs are leaders in multifamily Energy Efficiency

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