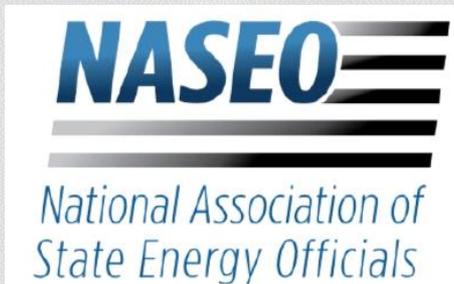

Energy Efficiency Financing in the Multifamily/Public Housing Sectors

Owner's Agent Services and Energy Performance Contracting



April 2, 2015

Public Housing Program

- **Established to provide decent and safe rental housing for eligible low-income families, elderly, and persons with disabilities**
- **Approximately 1.2 million households living in public housing units**
 - **Managed by some 3,300 HAs**
- **The U.S. Department of Housing and Urban Development (HUD) administers Federal aid to local housing agencies (HAs)**
- **HUD furnishes technical and professional assistance in planning, developing and managing these developments**

EPC Marketplace Opportunities

● Rising utility cost in Public Housing

- Americans spend \$200 billion annually to light, heat, and cool their homes
 - Of \$200 billion, HUD spends \$7 billion annually, ~13% of its budget (allowances and grants); \$53B (2015)
 - \$1.57 billion PHA –paid (20% of expenditures)
- + \$ 452 million in tenant paid
- \$ 2.0 billion (total utility cost in PH)

EPC Inventory 2010-2011 (Executed Contracts)

PHA Type by Unit Count	PHAs	Percent of PHAs	Active or Completed EPCs*	Percent of PHAs w/EPCs*	Percent of Total PHAs	Total Invested (\$M)*
Very small (Less than 250)	2332	74.6%	27	1.1%	<1%	\$24.0
Small (250-499)	430	13.8%	72	16.7%	2.3%	\$93.3
Medium (500-1,249)	229	7.3%	68	29.8%	2.2%	\$167.0
Large (1,250-6,599)	120	3.8%	87	72.5%	2.6%	\$538.5
Very large (More than 6,599)	14	0.4%	11	78.6%	.4%	\$279.9
Total	3125	100.0%	265		8.5%	\$1,102.7

*Source: 2012 Report to Congress, Affordable Green: Renewing the Federal Commitment to Energy-Efficient, Healthy Housing

EPC – An Historical Perspective

Category	2012
# of EPCs	270
EPC investment	\$1.2B
# of V Small (<499)	106
Self-developed projects	26
Projects repaid	21
Internal Rate of Return	~ 10.9%

U.S. Public Housing Sector – Energy Barriers

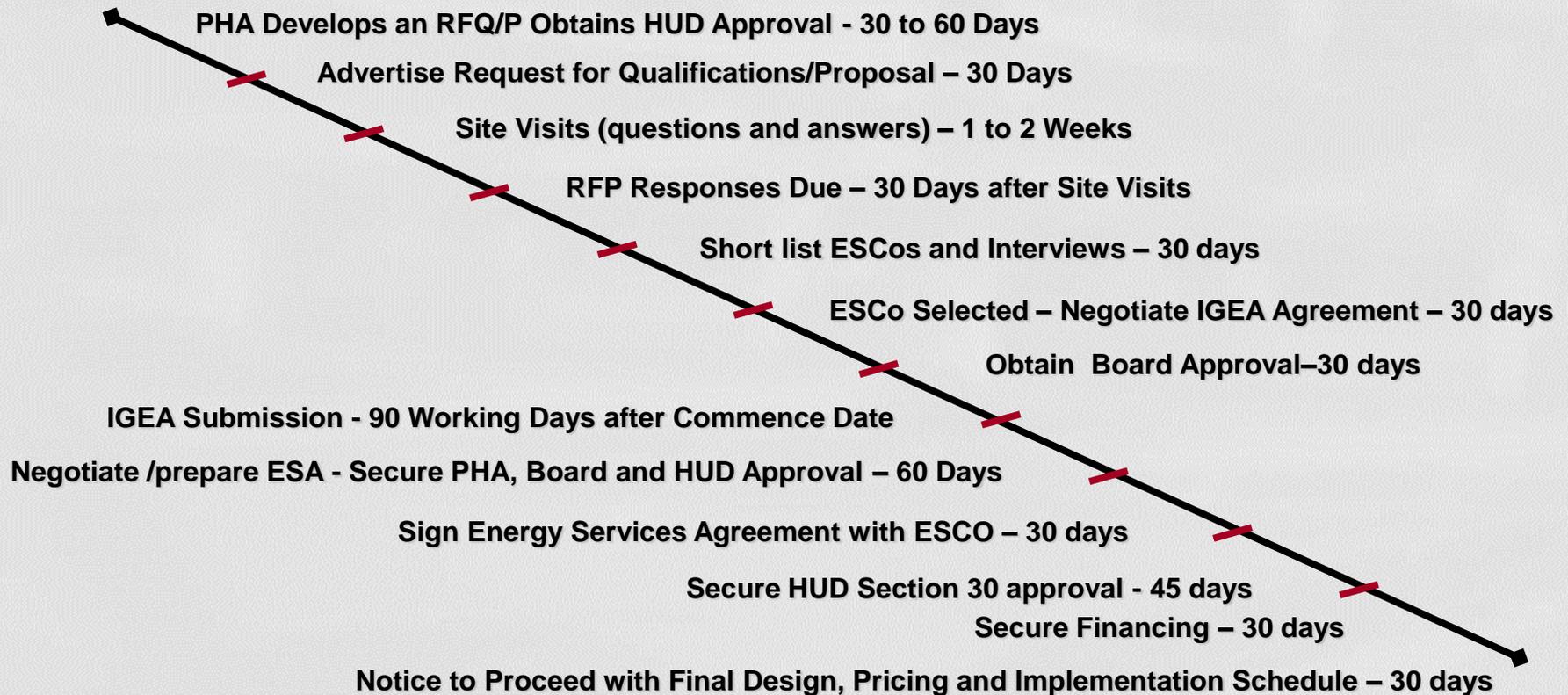
- **Majority of PHA buildings built pre-1970**
- **Process is too complicated – 12 to 18 month to get installation**
- **Lack of education on the part of lenders**
- **Energy conservation is not core mission of PHA**
 - 100% occupancy and rent collection, compliance
- **Investors perceive a lack of investment opportunities at scale with attractive returns, strong risk management**
- **10 - 15 EPCs down from 20+ annually**
 - RAD caused PHAs to pause and consider transition to MF program

Opportunity for EPCs in Maryland

- **32 Public Housing agencies in MD; ~1 percent**
 - 18,754 Units
 - DOE competitive grant to provide owner's agent services to local governments and PHAs to explore, evaluate, and implement EPCs
- **Compliments State grant and utility rebate programs**
- **More information online:**
<http://energy.maryland.gov/Education/EnergyPerformanceContractingAssistanceProgram.htm>

EPC Timeline in Public Housing

**Time Line – 14 to 18 months from
Development of RFP to NTP**



EPC – ESCO Managed

- **Projects can be done turn-key (ESCO)**
- **Generated savings must pay for measures, fastest payback ECMs are primary target**
- **One stop contracting**
- **Experienced national and regional firms**
- **Long established policies and procedures**
- **Guaranteed savings are available**
- **Provide for financing**
- **Solution to capability and capacity issues**
- **Plan EPCs in conjunction with broader capital projects**

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Overview – Performance Incentives



Operating Fund Benefit

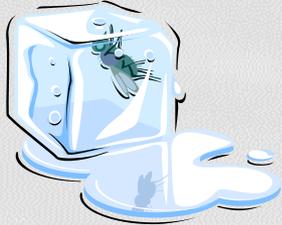
PHA share a decrease in utility consumption with HUD 75/25

Rate Reduction Incentive

If PHA takes initiative to reduce the rate it pays for utilities, then PHA will be permitted to retain 100/50 percent of the annual savings **New – applies to PHA paid and resident paid utilities**



Overview – Energy Performance Contract Incentives



Frozen Rolling Base Subsidy

Pre-construction utility consumption level is frozen for term of contract. Up to 100% usage savings + increases as utility rates rise.



Add-on Subsidy

PHA receives annual subsidy for utility costs + EPC contract costs.



Tenant Paid Utility Incentive

Rent increases, commensurate with utility cost savings; savings pay project costs.

Incentives created by 1988 legislation; implemented by 1993 regulations

Financing



- EPCs are typically funded with long-term debt or leases by third-party institutions
- Established and well capitalized market for EPCs
- Advantageous to capital-limited PHAs
- Lease purchasing agreements are alternatives to debt-based financing
- 300+ EPC projects investing more than \$1.5B (2014)

Owner's Agent Services

- **Uniquely PHA qualified, experienced consultants**
- **No-cost offer attractive to PHAs with competing priorities**
- **Specific services to assist PHAs include:**
 - Developing EPC RFQ and RFP packages
 - Assist PHA in evaluation of RFQ/RFP EPC responses
 - Review/analyze IGEA on behalf of the PHA
 - Assist in negotiation of Energy Service Agreement with ESCOs
 - Provide necessary training to PHA staff to ensure full understanding of the HUD energy incentives
 - Assist in evaluation of cost reasonableness to validate project costs
 - Validation of ESCo Measurement & Verification reports

Untapped? – 179D Rebate

- **Tax deduction at Section 179D of the Internal Revenue Code**
- **Encourages EE design/construction**
 - Expired 12/31/14; Still valid for projects installed after 2011
- **Size - at least 40,000 square feet of energy retrofits.**
- **Eligibility - Any (3+ stories) PHA, governmental entity including schools, airports, cities, counties, states, federal agencies who have done lighting, HVAC & building envelope energy upgrades**
- **Statute is blind to funding source - Capital funds, ARRA monies, State or DOE grants or EPC**
- **Government entity allocates its 179D deduction to ESCOs, architects or engineers; in exchange for a negotiated payment**
- **HUD guidance developed to promote use of 179D**
- **179D extension under consideration as part of Congressional Tax Reform legislation**

Rental Assistance Demonstration

- **RAD is HUD's rental housing preservation strategy, which works to:**
 - Preserve HUD –funded public and assisted housing (losing 10,000 – 15,000 units annually)
 - Streamline housing rental programs
 - Simplify program administration
 - Leverage private financing to meet public housing capital needs
 - Encourage broader housing planning efforts
 - Introduce greater market discipline
 - Enhance tenant choice
 - Build strong, stable communities

Key Debate: EPC v. RAD v. Both

- **Grant team in unique position to educate PHAs on EPC as an interim step to RAD...**
 - Helping PHAs implement EPCs to:
 - Improve operational efficiency of PHAs that are not currently suitable for RAD conversion
 - Strengthen position for PHAs considering RAD, however, can't convert at current funding levels
 - Continue to reduce utility costs in PHAs that do not have great capital needs and not currently seeking RAD conversion
 - And supporting PHAs and others in MD with alternative financing mechanisms and incentives
 - EmPOWER Maryland utility rebate programs
 - Maryland Smart Energy Communities and Low-to-Moderate Income Grant Programs
 - Low-interest Jane E. Lawton Conservation Loan Program

Progress to Date

- **Three PHAs signed up and participating**
 - HACA, Elkton, and Hagerstown
 - All three received walk-through audits of facilities
 - Evaluating options
- **Support for PHA sector in Maryland and beyond**
 - Upcoming article in national housing journal
 - Formal presentation at MAHRA
 - EPC v. RAD decision tree

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