

**MULTI-FAMILY HOUSING:  
An Underserved Market for Combined Heat and  
Power (CHP)**

**PROSPECTS FOR CHP  
IN HUD MULTIFAMILY PROGRAMS**

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# HUD MULTIFAMILY HOUSING PROGRAMS

- ◆ The major multifamily programs are:
  - public housing
  - senior housing
  - FHA mortgage insurance
- ◆ Approximately 5 million units nation-wide
- ◆ Each has different legislation affecting
  - ownership
  - levels and types of subsidy
  - economics

# HUD SPENDS AN ESTIMATED \$4 BILLION EACH YEAR ON UTILITIES

- ◆ Public housing expenses include an estimated \$1.1 billion in utility expenses.
- ◆ Remainder through utility allowances (Housing Choice Vouchers) or Section 8 multifamily contracts
- ◆ More than 10% of entire budget

# PUBLIC HOUSING

- ◆ Owned by local public housing agencies
- ◆ HUD provides
  - long term loan for construction
  - a portion of operating expenses, including utilities
  - capital grants for modernization
  - energy performance contracting
    - 12-20 yrs

# HOUSING FOR ELDERLY AND HANDICAPPED

- ◆ Owned by non-profit corporations
- ◆ HUD provides capital advance for construction
- ◆ No HUD support for operating expenses

# FHA MORTGAGE INSURANCE

- ◆ Private for-profit ownership
- ◆ FHA insures mortgage
- ◆ Can refinance for capital improvements
- ◆ No HUD capital funding programs
- ◆ Obstacles to energy performance contracting & use of reserves

# OBSTACLES FACING CHP FOR MULTIFAMILY HOUSING

- ◆ Lack of familiarity with what it is
- ◆ Lack of tools for analyzing potential
- ◆ State of the technology
- ◆ Electric utilities resistance, levies
- ◆ Federal CHP programs aimed at large scale opportunities, industries
- ◆ Physical obstacles: size, configuration, individual-metered buildings
- ◆ HUD rules, reviews delay implementation

# HUD ENERGY ACTION PLAN

- ◆ 21 Actions approved by Dep. Secretary-
- ◆ # 20 = Promote CHP in housing and community development.
- ◆ HUD-DOE CHP Agreement
  - CHP Guides for multifamily housing
  - Regional CHP Application Centers

# HUD CHP ACTIVITIES

- ◆ **New Guides**
- ◆ **Screening Tool: ORNL Software**
- ◆ **Website**
- ◆ **Technical Assistance**
- ◆ **Invitations to submit data**

# STEPS TO IMPROVE PROSPECTS FOR CHP IN HUD MULTIFAMILY HOUSING

- ◆ Inform the housing and related industries.
- ◆ Expand the software tools for housing use.
- ◆ Improve the technology & CHP packages.
- ◆ Resolve utility issues.
- ◆ Focus federal CHP efforts on multifamily housing.
- ◆ Simplify conversion from individual to master/sub-metering.
- ◆ Improve HUD review capacity.

## SOURCES OF INFORMATION

- DOE CHP Initiative: [www.eere.energy.gov/de/](http://www.eere.energy.gov/de/)
- CHP Regional Application Centers (RACs):  
[www.bchp.org/rac.html](http://www.bchp.org/rac.html)
- EPA CHP Partnership: [www.epa.gov/chp](http://www.epa.gov/chp)
- HUD CHP Activities:  
[www.hud.gov/offices/cpd/energyenviron/energy/index.cfm](http://www.hud.gov/offices/cpd/energyenviron/energy/index.cfm)
- USCHPA [www.uschpa.org](http://www.uschpa.org)
- NYSERDA [www.nyserda.org](http://www.nyserda.org)
- United Kingdom: [www.actionenergy.org.uk/](http://www.actionenergy.org.uk/)