

# **Energy Efficiency at the West Virginia Division of Corrections**



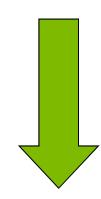
Johnson Controls

May 21, 2015



## **Energy Savings Contracts**

- Reduce energy usage
- Reduce water usage
- Reduce operating and maintenance costs
- Reduce emissions
- Reduce waste



In short, **Performance Contracting** is a procurement tool that allows you to leverage the savings you get from making building improvements in order to pay for the improvements.





## **WV DOC Project Objectives**

- Long term savings, comfort and building functionality
- Support goals of WV Energy Roadmap
- Ensure improvements meet correctional standards
- Address needed deferred maintenance projects







#### Locations

# Mt. Olive Correctional Complex

- Approx. Population 1,050
- Square Footage 483,000

#### Denmar Correctional Center

- Approx. Population 216
- Square Footage 120,000

# Huttonsville Correctional Center

- Approx. Population 1,130
- Square Footage 477,000

# Pruntytown Correctional Center

- Approx. Population 370
- Square Footage 161,000





# WV Division of Corrections **Energy and Facility Improvement Measures**

- Heating System, Boilers, Pumps
- Administrative Cooling Systems
- Temperature Control Systems
- Piping Distribution System
- Air Distribution Systems
- Domestic Hot Water Heaters
- Water System Upgrades
- Water Softener System
- Energy Efficient Dishwashers
- Building Envelope Improvements
- Central Laundry Plant
- Lighting System Upgrades
- Training Services





#### **Photo Tour**

#### **Huttonsville Correctional Center**



**Existing Steam Piping System** 



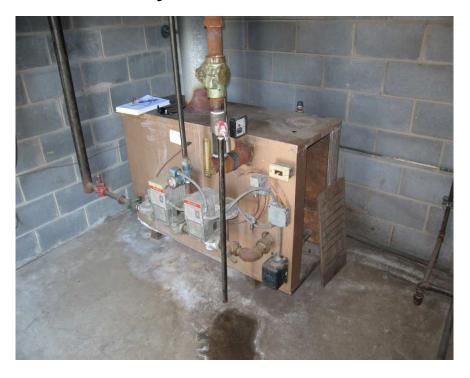
**New Piping System** 





#### **Photo Tour**

#### **Pruntytown Correctional Center**



**Building 18/19 Existing Boiler** 



**Building 18/19 New Boilers and Pumps** 





# **WV Division of Corrections Financial Impact**

Facility Improvements: \$18,000,000

Guaranteed Annual Savings \$1.2 million

- Improvements 100% funded by reduction in energy and operational savings
- Approximately \$1 million in savings through 9 months of first year of the guarantee
- On track to exceed first year savings guarantee by approximately 10%





### **WV Division of Corrections Project Benefits**

- Long term infrastructure improvements
- Reduction in energy, water and operational costs
- Improved environmental conditions
- Addresses deferred maintenance
- Support WV Energy Plan and Policies



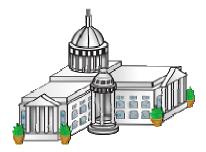


# **Energy Savings Contract Benefits**

- New jobs and additional spending in the State economy
- Improved energy efficiency in State facilities
- Significant facility infrastructure improvements
- Reduced expenses and operating costs
- Reduced GHG emissions
- Support WV Energy Plan and Policies













## **Additional Project References**

- Kanawha County Schools
- Marion County Schools
- **Marshall County Commission**
- Preston County Commission
- Raleigh County Commission





# **Questions & Discussion**



