



AMERICAN DEVELOPMENT
INSTITUTE

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Boston Housing Authority



SUMMARY

ADI Energy evaluated the complete engineering for the products on Boston Housing Authority's energy project that included all conceivable ECMs. ADI Energy is responsible to review all M&V reports that were developed by an energy services company.

Energy Conservation Massachusetts

Size: Over 6000 apartments, 60 buildings

Overall value: \$60+ million

SERVICES

- Contract review
- Energy savings analysis
- Commissioning
- Preparing/analyzing energy savings M&V reports
- Energy audit development and analysis
- EMS trending
- Energy modeling
- Cogeneration energy
- Conservation solutions
- Design build energy

UNIQUE VALUE TO CUSTOMER

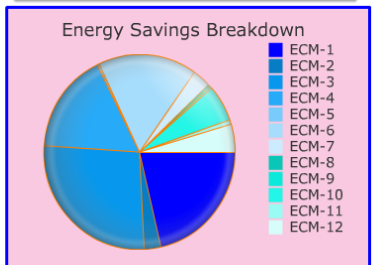
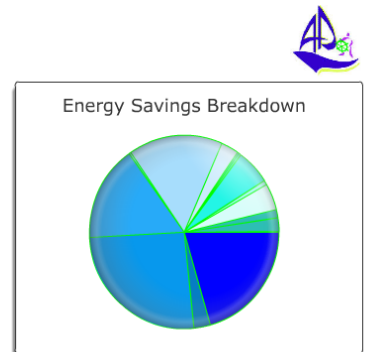
ADI Energy is supporting Boston Housing Authority's review process of a \$60+ million energy project. ADI Energy has ranked number 1 for contract knowledge and energy analysis ability by Boston Housing Authority through a competitive process. ADI Energy has reviewed the energy services report, made recommendations based on project savings and project investment. Partial value engineering on site selection, ECM designs and overall project impact have been utilized to insure the Boston Housing Authority project is the most economically justifiable. Renewable energy and cogeneration was evaluated and any grants were reviewed.

MEASURES

- Lighting design
- Renewable Energy—Solar and Micro-turbine
- Heating conversions
- Cogeneration
- Electrical Upgrade
- Steam traps
- Energy management system
- Boilers

- ✓ ECM-1-Lighting
- ✓ ECM-2-Lighting Controls
- ✓ ECM-3-DDC System
- ✓ ECM-4-Variable Frequency Drives
- ✓ ECM-5-Premium Efficiency Motors
- ✓ ECM-6-Steam System Upgrades
- ✓ ECM-7-De-stratification Fans
- ✓ ECM-8-Air Sealing
- ✓ ECM-9-Vending Machine Controls
- ✓ ECM-10-Retro-Commissioning
- ✓ ECM-11-Replace Air Separator
- ✓ ECM-12-Swimming Pool Cover
- ✓ FMP-1-Replace HV Unit #5
- ✓ FMP-2-Refurbish H&V Units
- ✓ FMP-3-Air And Water Balancing
- ✓ FMP-4-Air Duct Cleaning
- ✓ FMP-5-Add Return Air Ductwork - HV-7/8
- ✓ FMP-6-Replace Gymnasium H&V Units
- ✓ FMP-7-Exercise Room Air Conditioning
- ✓ O&M-1-Water Conservation
- ✓ O&M-2-Piping Insulation Repairs
- ✓ O&M-3-Electrical Systems PM Program

Investment	Annual Savings
365,604	79,123
59,596	10,653
586,953	99,370
268,465	61,549
14,233	1,559
153,452	61,685
94,600	11,381
17,544	1,467
3,153	1,394
76,884	22,319
25,800	2,858
151,934	17,189
\$	\$
\$697,215	\$5,254
\$	\$
\$	\$
\$339,954	\$
\$28,667	\$
\$8,600	\$8,913
\$11,467	\$454
\$14,333	\$



Dial in Your Deal

Term

14

Rate

4.25

Additional Investment Available

\$1,843,513

Investment

\$2,918,946

NPV Cashflow

\$1,742,900

Savings

\$385,175