



AMERICAN DEVELOPMENT  
INSTITUTE

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## Amesbury High School (Feasibility Study for Biomass Heating Plant) Amesbury, MA



### SUMMARY

American Development (ADI Energy) was hired by the Massachusetts Department of Energy Resources (DOER) to investigate the economic and operational impacts of installing a biomass energy plant at Amesbury High School in Amesbury, MA.

**Size:** 183,100 sq. ft.

### SERVICES

- Life cycle cost analysis
- Capital investment and maintenance planning
- Consumption usage analysis
- Site evaluation
- Resource assessment
- Consumption usage analysis
- Environmental and regulatory analysis
- Investment grade audit energy
- Preliminary assessment for energy
- Alternative energy services
- Energy engineering
- Energy financial analysis

### MEASURES

- Biomass heating plant

### UNIQUE VALUE TO CUSTOMER

The Town of Amesbury is searching for a more efficient, economical solution to the growing energy costs of Amesbury High School.

ADI Energy has estimated that a wood chip biomass heating plant has a superior life cycle cost to a current fossil fuel. The capital cost of the wood chip system is approximately \$580,000. This cost would include a new biomass boiler system and wood chip storage building at Amesbury High. The Town of Amesbury will save \$92,913. The payback of the Amesbury High School project will be in 6.24 years.

ADI Energy provided the Town of Amesbury with a report that had an assessment of the wood chip biomass heating plant due to the fact that it has a superior life cycle cost to existing fossil fuel heating. ADI Energy also presented extensive detail on current industry practice, assessed biomass fuel availability specifically relevant to the Amesbury High project, and concluded with an investment evaluation of a recommended system.

