



AMERICAN DEVELOPMENT
INSTITUTE

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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 Lexington High School in Lexington, MA.

Size: 328,500 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
- Utility management
- Utility reductions

MEASURES

- Biomass heating plant

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



UNIQUE VALUE TO CUSTOMER

The Town of Lexington is searching for a more efficient, economical solution to their growing energy costs of Lexington 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 \$900,000. This cost would include a new biomass boiler system and wood chip storage building at Lexington High School. Lexington High School will save \$253,207. The payback of the Lexington High School project will be in 3.6 years.

ADI Energy provided the Town of Lexington 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 Lexington High School project, and concluded with an investment evaluation of a recommended system.

