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SUMMARY

American Development (ADI) 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

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 its high school.

ADI 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 the site. The high school will save \$253,207. The payback of this project will be in 3.6 years.

ADI provided the Town 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 also presented extensive detail on current industry practice, assessed biomass fuel availability specifically relevant to this project, and concluded with an investment evaluation of a recommended system.

