Successful Projects
In Academic Institutions
The Hotchkiss School
Lakeville, Connecticut
An independent boarding school founded in 1891.

Their 600 students in grades 9-12 come from across the US and 37 foreign countries.

100% of their students go on to college.
The 827 acre Hotchkiss School Campus has 85 buildings totaling over 1.2 million square feet.
Total Project Cost

$14,000,000
2012 Fuel Oil Cost $852,000

2013 Wood Chip Cost $357,000

Approximate annual fuel savings $495,000
Other project benefits:

$357,000/year invested in the local economy for sustainable fuel

Sulfur dioxide emissions reduced 90%

Campus carbon footprint reduced 45%

(Goal is to be carbon neutral by 2020)
Norwich University
Northfield, Vermont
Founded in 1819
Norwich University is the birthplace of the Reserve Officers’ Training Corps (ROTC).

Located in the Green Mountains of Vermont, its 2,300 students come from 45 states and 20 foreign countries.

Total Project Cost $6,000,000
<table>
<thead>
<tr>
<th>Chips Tons</th>
<th>Chips Dollars</th>
<th>Oil Gallons Displaced</th>
<th>Cost of Oil Displaced</th>
<th>Fuel Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,936</td>
<td>$493,670</td>
<td>484,108</td>
<td>$1,358,408</td>
<td>$864,737</td>
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</tbody>
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Since the wood chip system will operate throughout the summer, annual savings will be about $1,000,000.

Old boilers burning #6 oil cost $19.35/mmbtu

Wood chip Boilers cost $7.46/mmbtu
Other Project benefits:

Over $600,000/year invested in the local economy for sustainable fuel

Sulfur dioxide emissions reduced 97%

A Simple Payback of 6 years
Welcome to Delta Junction

"Alaska's Friendly Frontier"

16 Mi. To
Visitor's Center

Elev. 1210
Inc. 1960
Located near the Alaska Range of mountains

Frequent below zero temperatures are part of each winter

Fort Greely is nearby, a launch site for anti-ballistic missiles and home to the Cold Regions Testing Center

Total project cost $2,800,000
Sept 2011 thru Sept 2013

Displaced 71,500 gallons of fuel oil valued at $266,200.

Fuel is processed by a Rotochopper grinder and is delivered for $60/ton.

When temperatures are cold (-35° F), two 20 ton truckloads lasts 10 days.
Other project benefits:

Over $35,000/year invested in the local economy for sustainable fuel

Saved 2 teaching positions

Music program was reopened

School kitchen was remodeled
In Conclusion:

Significant fuel savings are available for both large and small biomass boiler systems.

Energy dollars are used locally for a renewable and sustainable fuel.

Environmental benefits like reduced emissions accompany cost savings.
Thank You