

The Greening of the Granite State

Concord, NH



The State of New Hampshire made a decision to use biomass to reduce carbon emissions and further its use of renewable energy. Con Edison Solutions was selected to manage a comprehensive energy efficiency project at the Department of Administrative Services campus in Concord.

An automated wood chip system was selected as the primary heat source for the building that houses the Department of Environmental Services/New Hampshire Department of Health and Human Services. The Hurst 250 HP boiler that was installed operates between 110-115 psi and produces 8,600 pph. The biomass system will consume 2,100 pounds of wood chips per hour at maximum output.

The new biomass boiler displaces 422,000 therms of gas that would have been used each year by the previous natural gas heating system. The wood chips burned in the biomass system are supplied by local vendors and delivered by local drivers, enabling New Hampshire to also direct heating dollars back into the local community.

The energy infrastructure upgrades for the entire campus represent a total investment of approximately \$12.7 million, and will be paid for by the estimated \$949,000 in annual energy savings over the project's 20 year term.



PROJECT HIGHLIGHTS

Environmental Benefits of Displaced Natural Gas

CO₂ Offsets: 12,000,000 pounds annually

CO₂ Equivalent: 1,052 cars removed from the roads annually

Technology

Hurst Boiler
Messersmith Cumbustor/
Furnace Base

System Size

8.3 MMBtu