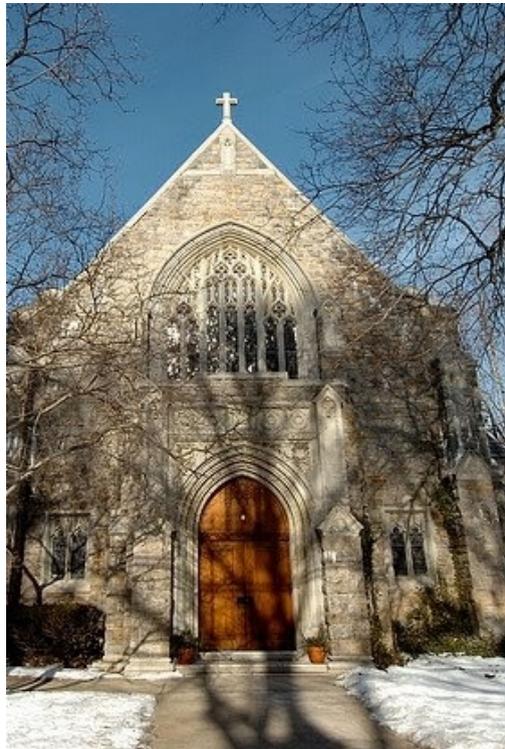


# Saint Bartholomew's Church

## Oil Boiler Conversion to Air Source Heat Pumps

St Bartholomew's Episcopal Church, located in White Plains, NY (Westchester Cnty), is taking the responsible path to savings.

Facing an emergency from loss of heat, and in the middle of a natural gas moratorium, "St Bart's" made the right decision: moving away from fossil fuels to a new VRF (Variable Refrigerant Flow) system. VRF uses electricity very efficiently to heat and to cool a building. This system is 3 to 5 times more efficient than the electric baseboard or the portable electric heater we know.



The 19,251 square foot facility was built in 1928. It includes the church (nave), an assembly hall, five classrooms and three offices. Prior to the VRF project, an oversized, aging oil boiler and portable electric space heaters were supplying heat to the facility. St Bart's was not fully air conditioned, making spaces such as the nave uncomfortable during the hottest days of the summer.

### **Impact:**

- \$8,500 Annual Savings with zero money down
- 55% Utility Bill Savings
- 70% Reduction of GHG emissions

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New equipment that means new revenue opportunities for the Church: the new VRF provides year-long, improved comfort to all spaces of the facility. Because the assembly hall is now fully air-conditioned, St Bart's plans to rent it out for weddings and events year round, estimating \$35,000 in new revenue for the Church.

Like for many churches, protecting the aesthetics and keeping noise levels to the minimum are strict requirements. The design firm and contractors worked closely with St Bart's to properly locate indoor units and to keep new wiring and piping invisible to the audience by running them behind decorative panels.

The Church signed a 15-year agreement with BlocPower to implement this retrofit project in order to see immediate savings and ensure their system will work for years to come. Through an Energy Service Agreement (ESA), BlocPower owns and has the obligation to maintain the new VRF equipment for the duration of the lease period. In return, the Church has agreed to make a fixed monthly payment with a 1% annual escalator.



The church made an optional deposit equal to 5% of the project cost in order to lower the regular payments. They will have an average monthly savings of \$710!