



BACKGROUND

The HSBC Place is a mixed use office building consisting of eight floors with a total of 140,000 square feet. The building's HVAC system includes HRV's, air handling units, humidifiers, chiller, heat coils, VAV boxes and baseboard heaters. Prior to the engagement with PMC, the HSBC Place consumed over 2.8 million kWh of electricity, resulting in over \$317,000 in annual energy expenditure.



BASELINE ENERGY PERFORMANCE

Building Size (sq.ft.)	140,000
Annual Electricity Consumption (kWh)	2,894,730
Average Electricity Demand (kW)	8,812
Total Energy Utilization Index (kWh/sq.ft./yr)	20.68
Total Annual Energy Costs	\$317,868

SCOPE

Through a detailed energy audit and understanding of the building, PMC was able to develop a scope that would reduce the annual energy consumption by **36%**, while **increasing building comfort**. The scope of the project included a total of ten Energy Efficiency Measures (EEM's), which included, but are not limited to:

- 1 Lighting controls installation
- 2 Installation of variable frequency drives and ultra-low leakage dampers on HRVs and AHUs
- 3 Chiller replacement
- 4 Building Automation System upgrades and new energy efficient operating sequences

RESULTS

⚡ ENERGY SAVINGS

1,040,702 kWh (36%) in annual elec. savings
1,412 kW (16%) in electrical demand savings
36% reduction in annual energy use
 (now at **13.24 kWh/sq.ft./year**)

💰 COST SAVINGS

\$113,665 (36%) in annual energy cost savings
\$75,000 in NB Power incentive rebates
ZERO upfront costs
5.3 year payback

🌍 ENVIRONMENTAL BENEFITS

291,397 kgCO₂eq of annual emissions avoidance
 (equivalent to over **505 acres** of mature forest land)

