## **Stamford Campus Energy Efficiency Renovations**

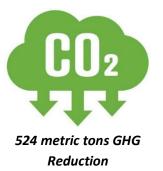
UConn's Facilities Operations department recently completed several large energy initiatives at the Stamford campus.

- The lighting systems were upgraded to LED across the entire Stamford Campus. The upgraded lighting provides both aesthetic improvements and supports the University of Connecticut's target to become a carbon neutral campus by the year 2030. The new LED fixtures use less than 25% of the energy compared to the older lighting system technology while improving light levels and light quality in many areas.
- Another key initiative was retro commissioning of the HVAC systems and the associated building control systems. This focused-on optimization of the mechanical equipment operation, rebalancing and retesting the systems that provide environmental comfort. This project was a 3-year effort and many additional repair items were identified and corrected.

## Snapshot of Stamford Electrical Energy Use by Fiscal Year







Greenhouse Gas Reduction	524 MTeCO2 √
Simple Payback on Investment	
Eversource Utility Incentives	\$494,517
Annual Utility Cost Savings	\$185,593
Annual Natural Gas Savings	28,317 ccf
Annual Electric Savings	918,990 kWh
Total Project Cost (Before Incentives)	\$939,007
Total Project Cost (Refore Incentives)	\$939.007



Total of Project Costs								
nitiative	Total Installed Cost	Utility Incentives	Net Cost					
Floor 1 LED Lighting Upgrade	\$177,267	67 (\$83,074) \$94						
Floor 2 LED Lighting Upgrade	\$139,004 (\$83,074)		\$55,930					
Floor 3 LED Lighting Upgrade	\$114,943 (\$83,074)		\$31,869					
Building Exterior, Garden / Park Area and Street Light LED Upgrade	\$128,288	(\$83,074)	\$45,214					
Building HVAC and Control System Retro- Commissioning	\$379,505	(\$162,220)	\$217,285					
Total of Energy Project Costs	\$939,007	(\$494,517)	\$444,491					
Misc Mechanical Repairs to VAV Terminal								
Units & Chiller Room Refrigerant Monitor	\$220,519	\$0	\$220,519					
Total Capital Expended \$665,02								

Annual Energy Savings							
Initiative	Electricity - Annual kWh				Total Annual GHG Reduction (metric tons)		
LED Lighting Upgrades	488,703	0	\$80,636	\$0	289.0		
Building HVAC & Control System Retro-Commissioning	430,287	28,317	\$70,977	\$33,980	234.5		
Total Savings	918,990	28,317	\$151,613	\$33,980	523.5		