

Rhode Island Energy[™]

Reducing energy usage at historic Rhode Island commercial property

The Tai-O Group

Nestled alongside the Blackstone River in Pawtucket, RI, in a historic National Heritage Corridor that celebrates America's transition from farming to industrialization, is the former Carol Cable Mill, one of many manufacturing mills that used to dot the neighborhood.

Now serving as a commercial hotspot in the area with a wide range of tenants including nonprofits, healthcare providers and more, the former Carol Cable Mill is now owned by The Tai-O Group, a real estate development company that specializes in construction and property management as well as commercial real estate acquisition and development.

The building is a good example of the company's ongoing efforts to restore properties for commercial profitability while at the same time providing a positive impact on the local community. The company makes it a priority to look for ways to continually enhance its properties and benefit its tenants.

That's why The Tai-O Group partnered with Rhode Island Energy to explore ways to reduce energy usage. RISE Engineering, an approved Rhode Island Energy vendor, conducted a thorough, no-cost energy assessment of the property and offered a variety of recommendations for energy savings.

Those recommendations included the replacement of both interior and exterior fluorescent fixtures with new customized LED lighting and occupancy sensors, as well as a new web-based building control system which can allow for easy remote energy usage monitoring.

LED Lighting Retrofit Project	
Total cost:	\$361,810
Rhode Island Energy incentives:	\$318,830
Customer cost:	\$42,980
Estimated annual energy savings:	350,484 kWh
Expected annual cost savings:	\$70,000

The Tai-O Group partnered with Rhode Island Energy to reduce energy usage at the former Carol Cable Mill, a commercial property it owns alongside the historic Blackstone River in Pawtucket, RI.



The Tai-O Group worked with Rhode Island Energy to replace both the interior and exterior fluorescent fixtures with new customized LED lighting and occupancy sensors.

The Tai-O Group Case Study

The complete retrofit to LED lighting project cost \$361,810, but after Rhode Island Energy incentives worth \$318,830 helped to offset the total cost, The Tai-O Group only had to pay \$42,980 for the project. The company anticipates saving 350,484 kWh, an approximate annual savings of \$70,000, and not only that, their investment will be paid back in less than one year.

The new building control system will allow The Tai-O Group to connect to a cloud-based program that can collect data from smart controls in rooftop units, fan coils, zone dampers, heat pumps, refrigeration systems, lighting panels and any other energy equipment.

The total cost for the control system was \$41,976, but after incentives of \$35,767 from Rhode Island Energy, The Tai-O Group only had to pay \$6,209. Not only will their investment be paid back in less than one year for this project as well, it is estimated they will save 21,591 annual kWh and 2,960 annual therms—worth approximately \$8,000 annually.

Control System Project	
Total cost:	\$41,976
Rhode Island Energy incentives:	\$35,767
Customer cost:	\$6,209
Estimated annual energy savings:	21,591 kWh
Estimated annual therms savings:	2,960 thm
Expected annual cost savings:	\$8,000

"The new system gives me a much higher level of visibility and control than I ever had before," said Louis Yip, president of The Tai-O Group. "It is easy to use—a great technology!"

The positive experience has led Yip to replace the lighting with LED and occupancy sensors at a second property that The Tai-O Group owns, the Chinese Christian Church of Rhode Island.

To request a no-cost energy assessment from Rhode Island Energy, visit rienrgy.com/smallbusiness





A new building control system allows The Tai-O Group to connect to a cloud-based program that can collect data from smart controls in the building's energy equipment.

"The new system gives me a much higher level of visibility and control than I ever had before."

Louis Yip, president of The Tai-O Group

These programs are funded by the energy-efficiency charge on all customers' gas and electric bills, in accordance with Rhode Island law.