



Energy Savings at SJI International



Location

Toa Payoh, Singapore



Size

Large



Sector

Educational Institution

Solution

ThermaClear®

20%
energy savings

Overview Savings Performance

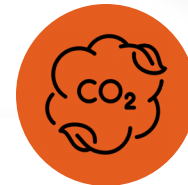
SJI International School is a cornerstone among Singapore's esteemed Lasallian Catholic educational institutions.

Established in 2006, SJII serves 2,200 students and teachers and consumption 2,158,000 kWh of energy each year. The school is actively exploring ways sustainability and energy efficiency can support its dedication to environmental stewardship.

This case study outlines the collaborative efforts between SJI International and ThermaClear® in implementing this energy-saving initiative. The following demonstrates the steps taken to achieve this goal.



20.3%
Energy Saving

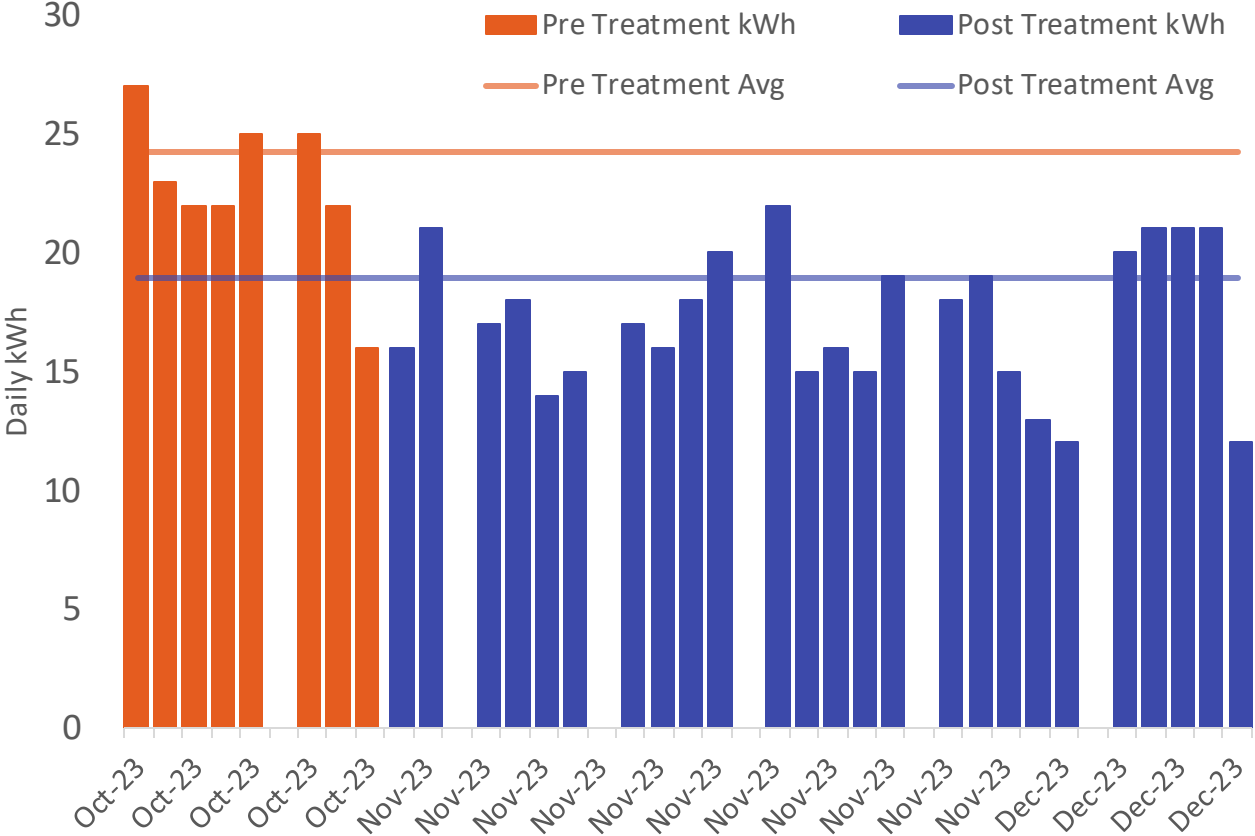


415kg CO_{2e}
Annual Prevented



2.9 yrs
Pay-back Period

Energy usage before and after ThermaClear®



This chart shows a classroom air conditioner's daily energy use, comparing normal usage (orange) with reduced usage post-ThermaClear® implementation (blue).

This demonstrates ThermaClear® effectiveness in lowering energy usage.

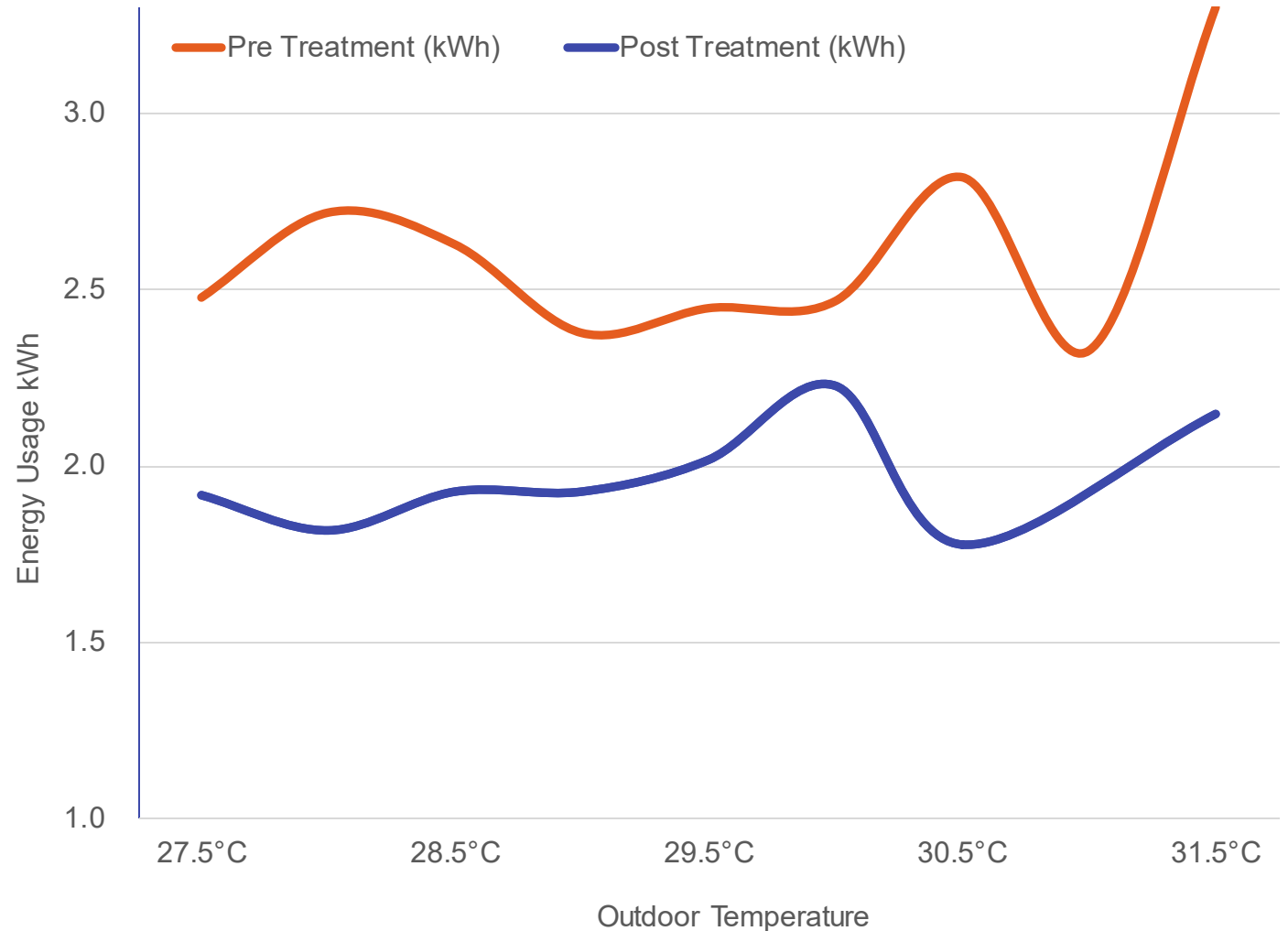
Equipment Details:

Sqft Covered	860 sqft
AC Manufacturer	三菱 Mitsubishi Electric
Redundancy	Single system
AC Type	DX, Split
AC Age	14 years
Refrigerant	R410A
Yearly % Run Time	19.5%, 8h, 190 days

Energy Savings Independent of Weather Changes

This chart shows hourly energy usage linked to specific outdoor temperatures. For example, the energy usage of this AC at an outdoor temperature of 30.5°C is 2.8 kWh before ThermaClear® and 1.8 kWh after.

By linking outdoor temperature to hourly energy usage, it is clear to see that energy savings are not caused by external weather changes, but can be attributed to ThermaClear®.



Long-Term Value for SJI International



20% Lifetime Energy Savings

ThermaClear® treated ACs will continue to have energy savings throughout the machine's lifespan.



Effortless to Implement

The treatment process took less than 1 hour with no interruption to occupants.



See Savings Fast

Energy savings confirmed within 2 months.



ThermaClear® Pays for Itself

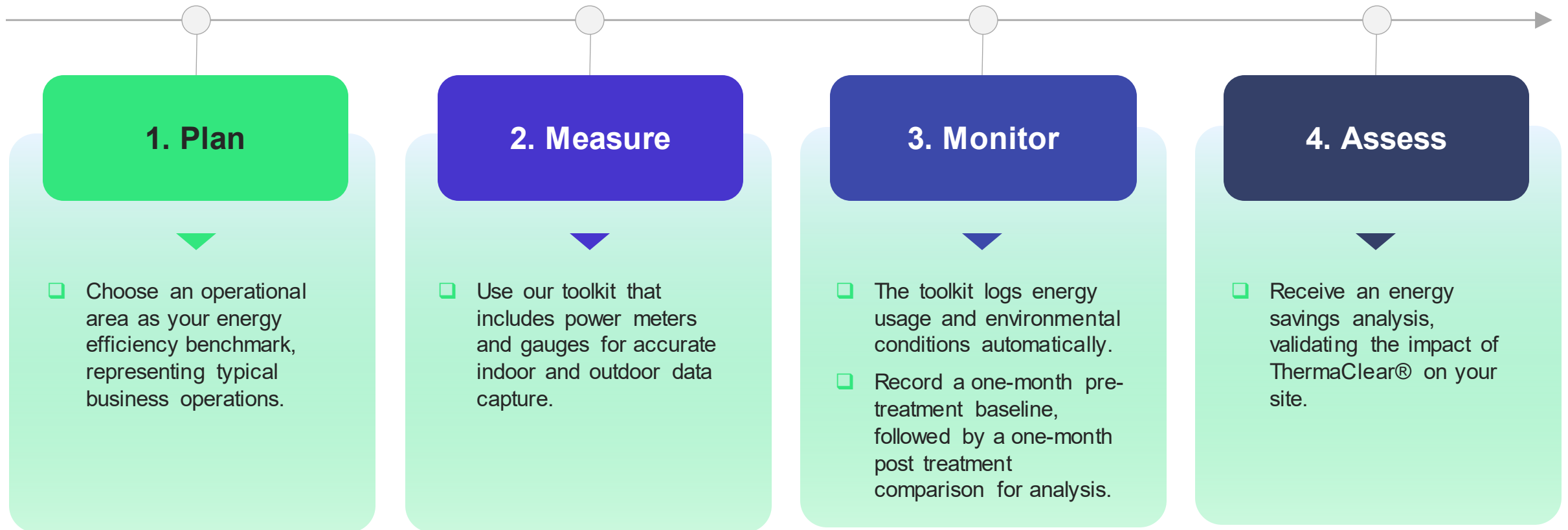
Even though classroom AC's run less than 20% of a year, the energy savings investment will be recouped in less than 3 years.



Over two thousand air conditioning units have adopted ThermaClear® for energy savings.

The Step-by-Step Process for Energy Savings

The approach used to quantify energy savings in this case study.



* For source data contact: gogreen@acwise.com

Appendix: Installing ThermaClear® at SJI International



<https://vimeo.com/884676159>