

Case Study



Client: **St John's Catholic School**
Project: **Networking and smart energy saving**
Solution Implemented: **Plexus Smart Energy Saving Suite**

Background

St John's Catholic School in Sydney operates on a strict budget, requiring any new system to be rigorously vetted for ROI. The school faced a dual financial burden: high operational costs for fire safety compliance, and significant energy waste occurring outside the 6-hour teaching day. Recognising the inefficiency of handling these issues separately, they identified that a single, smart system could solve them simultaneously by automating compliance and enforcing efficient energy consumption.



Challenge

- Lights were being left on after hours.
- Increasing emergency light testing and repair cost resulted in greater financial pressure to maintain compliance.
- Incomplete asset lists were leading to inefficiencies and potential non-compliance risks.
- Fragmented records for managing emergency lighting compliance.
- No method of tracking energy savings.

Solution

To address these challenges, the school opted for a complete upgrade of its lighting system by implementing the **Plexus Smart Energy Saving Suite**.

This included:

- **Installed Elumen EEL hardware**, enabling automated monitoring and reporting.
- **Installed the Beacon Switch**, a smart control unit that was compatible with the school's existing light fittings, saving money on new lamps. This single solution was configured to:
 - Automate lighting from 9am-4pm, matching the daily school schedule.
 - Provide a 2-hour manual override timer for after-hours use.
 - Automatically switch off all lights during school holidays.
 - Deliver an online record of all energy savings via the Plexus Console.
- **Provided 24/7 remote access** to monitor and control all school lighting through the Plexus Console.

Results

By connecting both its EEL and new smart lighting to the unified Plexus network, St John's Catholic School achieved its goals for both compliance and energy efficiency.

- **Automated Compliance & Labour Savings:** The Elumen EEL system eliminated the high cost and disruption of manual testing. It now provides automated, error-free compliance reports, saving significant time and operational budget.
- **Drastic Energy Reduction:** The automated Beacon Switch schedule ensures lights are only on while being used. This has maximised energy efficiency by automatically preventing all energy waste during evenings, weekends, and school holidays, reducing electricity bills on lighting by up to 79%.
- **Verifiable Return on Investment:** The Plexus Console provides a detailed online record of energy savings, allowing the school to track, measure, and prove the system's financial return, satisfying their strict budgetary oversight.
- **Streamlined Facility Management:** With both emergency and general lighting on a single dashboard, the facility team now has complete, simplified oversight of the entire building, managing compliance and energy use from one platform.

Conclusion

Facing high manual compliance costs and energy waste outside its 6-hour teaching day, St John's Catholic School sought to unify its emergency and general lighting on the Plexus platform. Automated EEL reporting eliminated compliance labour costs, while the intelligent lighting schedule cut energy waste during all non-operational hours. St John's successfully turned two of its largest operational expenses into a perfect, real-world example of how to be efficient in a way that you can prove with data.

