

Case Study



Client: **Madison Heights**

Project: **Networking and Smart Energy Savings**

Solution Implemented: **Plexus Smart Energy Saving Suite**

Background

Madison Heights is a signature 30-level luxury building in the heart of Bowen Hills, considered Brisbane's new CBD. It features 308 apartments, and ground-floor shopping. For a prestigious, high-density building of this scale, ensuring the safety of residents and the seamless operation of all amenities is a key priority for facility management.



Challenge

- Establishing a wireless IoT connection throughout a large multi-storey building requires a strong LoRa connection.
- Requires monitoring of normal lighting and emergency lighting through one unified platform.
- Steadily rising energy prices turn any energy waste from manual lighting systems into a major source of avoidable financial losses.

Solution

To address these challenges, Madison Heights was equipped with the latest in smart lighting technology with the **PLEXUS Smart Energy Saving Suite**.

This included:

- **Installation of Elumen's energy efficient EEL hardware**, enabling automated monitoring and reporting.
- **Installation of Beacon Relays**, which provide occupancy sensors, smart controls and energy saving records for normal lighting.
- **Integration with the PLEXUS cloud-based platform**, providing real-time data access and compliance tracking.
- **Creation of a centralised asset list**, improving visibility and management efficiency.
- **24/7 remote monitoring**, allowing for proactive maintenance and issue resolution.

Results

By integrating the Plexus automated lighting system during construction, Madison Heights realised immediate and long-term benefits from the moment it became operational:

- **Guaranteed compliance**, eliminating regulatory risks.
- **Energy savings**, from occupancy based lighting controls automatically switching off lights in unoccupied areas, delivering substantial savings on electricity bills.
- **Improved asset management**, with all lighting systems tracked in one unified platform.
- **Enhanced operational efficiency**, with reduced light use in common spaces and automated compliance reports for emergency lighting.

Conclusion

As a signature new build, Madison Heights required intelligent systems from the outset to manage long-term operational costs and prevent future inefficiencies. By integrating an automated lighting control system during construction, the building **proactively avoided the significant energy waste** and financial drain of manual lighting.

The system's occupancy sensors ensure energy is only used when needed, minimising electricity costs from the moment the building opened. This project proves that integrating a smart technology platform like **Plexus** from the start is the most effective way to deliver a sustainable, cost-efficient, and future-proofed property for residents.

